

# PSYCHOLOGICAL ABSTRACTS

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# PSYCHOLOGICAL ABSTRACTS

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## GENERAL

4825. **Anderson, J.** *Mind as feeling.* *Australas. J. Psychol. & Phil.*, 1934, 12, 81-94.—The three theoretical characteristics of mind, cognition, conation and affection, were formerly regarded as *sets* of mental process, while they are now generally considered as *aspects*. But in "cognitionalism" and in the doctrine of striving even the representation of the first two qualities as aspects of mind is untenable. In the former case, knowledge is held to be a relation, and a relation cannot be an aspect. In the case of conation this difficulty is avoided, but it becomes impossible to give a fully descriptive account of mind by conation alone. *Feeling* is therefore recommended as a category which allows for full description. McDougall, Alexander, and others, approach this position, but are prevented from occupying it because of "cognitionalism" and other interpositions of theory. Interpretation of mind as feeling may be adequately realistic and pragmatic.—*H. D. Spoerl* (Boston).

4826. [Anon.] *Bericht über den VII Kongress für Psychotherapie.* (Report of the seventh Psychotherapeutic Congress.) *Zentbl. f. Psychotherap.*, 1934, 7, 129-134.—The meeting was held at Nauheim May 10-13, 1934, with Sommer as honorary president, Jung as president of the Ueberstaatlichen Gesellschaft, and M. H. Goering as Reichsdirector of the Deutsche Gesellschaft. Representatives were present from Germany, Switzerland, Denmark, and Sweden. The papers and reports will appear in the *Zentbl. f. Psychotherap.* Goering in the closing address stressed the enrichment of German psychotherapy by Hitler's ideas and the duty of every practitioner to study *Mein Kampf*. The value of the book depends not on scientific expression but on its inner intuitive content.—*M. E. Morse* (Baltimore).

4827. **Bills, A. G.** *General experimental psychology.* New York: Longmans, Green, 1934. Pp. 620. \$4.00.—The present textbook is written from an eclectic standpoint. Data from animal and abnormal behavior receive some treatment, but individual differences are excluded. 146 pages are devoted to sensory and perceptual processes; 190 pages to learning and association; and 131 pages to work and fatigue. In addition 18 pages are given over to a general consideration of the methods and problems of experimental psychology, and 40 pages are devoted to emotional and affective processes. Two appendices contain material on statistical method and on psychophysics. Selected references follow the various chapters.—*W. S. Hunter* (Clark).

4828. **Bonaventura, E.** *La psicologia nel pensiero e nell'opera di Francesco De Sarlo.* (Psychology in the thought and works of Francesco De Sarlo.) *Logos*, 1933, 16, No. 4. Pp. 16.—Fr. De Sarlo was one of the initiators of psychological study in Italy.

In 1903 he established the Institute of Psychology at the University of Florence. He has published several volumes containing contributions on such questions as the following: psychic activity, imagination, the connection between consciousness and the subconscious, psychic causality, the methods of psychology, psychic development, and heredity. At several points De Sarlo's thinking resembles that of Wundt. He was one of the first to announce the principles which the theory of Gestalt later generalized. For De Sarlo mental experience is the subject matter of psychology, and its method is experimental. Although psychology is related to biology and the social sciences, it is itself an independent science.—*R. Calabresi* (Rome).

4829. **Brown, J. F., & Feder, D. D.** *Thorndike's theory of learning as Gestalt psychology.* *Psychol. Bull.*, 1934, 31, 426-437.—Thorndike recently has greatly modified his classical three laws of readiness, exercise, and effect, and has postulated five new concepts: belonging, identifiability, availability, trial, and system. The writers here attempt to demonstrate that the latter are really basic postulates of Gestalt theory. They further argue that Thorndike's criticism of Gestalt theory is based on prejudice and insufficient knowledge of its tenets.—*J. F. Dashiell* (North Carolina).

4830. **Burridge, W.** *A new physiological psychology.* Baltimore: Williams & Wilkins, 1934. Pp. 168. \$3.00.—The author first points out that physiological psychology has so far been based on the three hypotheses that neurones have one source of energy only; that they are quiescent until excited to activity by an external agent, the stimulus; and that the excitation of the members of the muscle-nerve preparation by electric currents corresponds to the reaction of a living organism to environmental change through its sense organs. These hypotheses are found inconsistent with new discoveries of fact which demonstrate that excitable tissues possess two sources of energy instead of the one hitherto presumed, and that there is producible in rhythmical structures a specific type of augmentation, the hysterical augmentation, whose properties are such as to leave no doubt that a rhythmical structure exists in the reflex arc, and that retinal end-organs also have inherent rhythm. A third new fact brought to account is that the proposition of stimulating a rhythmical structure to augmented activity is quite different from that of exciting a quiescent one to any activity at all. The capacity of a rhythmical tissue to have its activity modified by environmental changes is termed its responsiveness, and it follows definite laws.—*W. Burridge* (Lucknow).

4831. **Buss, O.** *Die Ganzheitspsychologie Felix Kruegers: Methodische Grundgedanken und grundlegende Ergebnisse.* (The totality psychology of



Felix Krueger: *Methodological principles and fundamental results.* (Munich: Beck, 1934. Pp. viii + 60. RM 3.—From the point of view of the Leipzig school mental and physical phenomena are interdependent, and the investigation of the one necessitates the investigation of the other. Spranger's psychology is briefly described as one of the methods of developing this kind of "physiological psychology." The separation between the mental and physical is of course only an abstraction. Krueger approaches the problem of their functional relationship from a non-mechanistic point of view, studying both as a unitary total. For him a "total" is a primary substance (*Wesensprimat*), which precedes its parts; the parts occur only because of and in the whole. Experience (*Erlebnisse*) is then discussed; for Krueger *total* experience (*Erlebnisanse*) is epistemologically and methodologically primary. The author then discusses experimental problems and methods, including those of a genetic nature. Introspection is accepted as offering data not otherwise obtainable. A discussion of social phenomena from this standpoint is included, and the point is made that to be systematically complete it must be applied to the whole field of human endeavor.—D. E. Johannsen (Skidmore).

4832. Cason, H. *Organic psychology II: The psychological organism.* *Psychol. Rev.*, 1934, 41, 356-367.—It is incorrect to say that psychology studies the organism as a whole any more than physiology does. It studies partial functions, but its chief concern is with the psychological organism, which is the product of hereditary, intraorganic, environmental and social factors. The framework of psychological activities is not simply sensory-neuromuscular, but involves the entire biological organism. The stimulus-response concept should not neglect the total pattern of concomitant internal and external events. The reflex-arc concept is over-simplified and in addition neglects to emphasize the fact that "the stimulus is not the beginning nor the response the end of the organic process." It is really a circuit rather than an arc. The concept of the psychological organism is not opposed to the experimental method, but justifies its use, since it is necessary to concentrate on a limited number of factors while attempting to control the others.—A. G. Bills (Chicago).

4833. Claparède, E. *X. Congrès international de psychologie et terminologie psychologique.* (Tenth International Congress of Psychology and Psychological Terminology.) *Arch. de psychol.*, 1933, 24, 160-164.—The Fourth Congress (Geneva, 1904) moved that an effort be made to unify and determine exactly, as far as possible, psychological terminology. The author reported on this question at the Copenhagen Congress (1932). He proposed that a vocabulary be assembled for each language, in which should be collected the various usages or meanings for each psychological term as found in the psychological literature, such as "will," "character," etc. Following this procedure, equivalent terms should be established for the various languages. The Congress moved that such a work be undertaken.—M. R. Lambercier (Geneva).

4834. Cory, D. *Realism of common sense.* *J. Phil.*, 1934, 31, 373-377.—The skeptical approach to knowledge is always possible, but Santayana has done the thing so well that it need not be done again. Besides, it ends in individual solipsism of the moment, which rather shakes the investigator's morale. We need rather an examination of the presuppositions underlying scientific procedure. Instinctive common sense, though it has its strong points, is not enough, since physics and physiology introduce us to a world that is alien to common perception; and a little epistemology is a dangerous thing, as the popular books of Eddington and Jeans too well show. Our task is "the criticism of the cognitive presumptions of common sense," that is, "to amend and clarify an unsophisticated or instinctive realism."—E. T. Mitchell (Texas).

4835. Dombrowsky, H. L. *Bericht über den 14. Kongress der Deutschen Gesellschaft für Psychologie.* (Report of the fourteenth congress of the German Psychological Association.) *Indus. Psychotechn.*, 1934, 11, 155-160.—The papers at the fourteenth meeting of the German Psychological Association were grouped into those dealing with (1) origin of social form, (2) theory of social behavior, (3) training in cooperation, (4) individual experiments.—H. J. P. Schubert (Transient Bureau, Buffalo).

4836. Ehrenstein, W. *Einführung in die Ganzheitspsychologie.* (Introduction to whole-psychology.) Leipzig: Barth, 1934. Pp. xi + 162. RM. 6.—Contents: the fundamental requirements for a description of experience, visual experience, auditory experience, the stratification of consciousness, mental set, thought, feelings, will, typical kinds of psyche.—W. Ehrenstein (Danzig).

4837. Ferguson, H. H. *Locke's theory of knowledge.* *Australas. J. Psychol. & Philos.*, 1934, 12, 107-118.—Locke's theory of knowledge as set forth in his *Essay* is not only contrary to fact, but in many instances the argument is inconsistent. This has been pointed out in part by J. Gibson, G. F. Stout, and others. Locke's conception of the idea as a representation is plausible only in a very few cases. His rejection of innate ideas falsely assumes that generals are derived from particulars, and the negative form of this argument makes it inconclusive. When Locke appeals to reality in explaining the combination of ideas he introduces a new category which itself needs to be substantiated. The paper is introduced as "a critical evaluation of what [Locke] says."—H. D. Spoerl (Boston).

4838. Fröbes, J. *Naturwissenschaftliche und geisteswissenschaftliche Psychologie.* (Psychology as a natural science and as a mental science.) *Scholastik*, 1934, 9, No. 1.—The author gives first an historical survey of the systems of both these types and their representatives. Next he deals with the principal problems: method, subject, "higher functions" and (according to Erismann) the distinction between causal explanation (method of the natural sciences) and teleological understanding (method of mental science). Instead of this distinction the author



proposes that of sensory and rational conscious life.—*K. v. Niederhöffer* (Berlin).

4839. **Giacomin, V.** *Il pensiero filosofico di Cartesio.* (The philosophical thought of Descartes.) Milan: "La Prora," 1933. Pp. 148. L. 10.—*R. Calabresi* (Rome).

4840. **Husband, R. W.** Can an eclectic position be sound? *Psychol. Rev.*, 1934, 41, 368-380.—The following arguments have been advanced in defense of eclecticism: (1) It enables one to select the best from each system of psychology. But who can say what is best? (2) It makes possible a compromise view on particular topics. (3) Single systems distort the truth, because of their selection of facts which support them. (4) Some material is common to all schools, such as experimental methodology. (5) Many leading psychologists belong to no particular school. The author, in refuting these arguments, attempts to state what a system is by analyzing some of the current systems, and shows why he believes that the acceptance of a fundamental premise necessitates the modification of one's views on every topic and hence why an attempt to hold an eclectic position is fundamentally unsound.—*A. G. Bills* (Chicago).

4841. **Jaensch, E. R.** *Die Lage und die Aufgaben der Psychologie.* (The position and the tasks of psychology.) Leipzig: Barth, 1933. Pp. 126. RM. 5.70.—*R. R. Willoughby* (Clark).

4842. **Kogan, H.** *Umriss der Entwicklungspsychologie, ihre Hauptvertreter und ihr Wesen.* (Survey of developmental psychology, its nature and its principal proponents.) Danzig: Kafemann, 1934. Pp. 71.—*R. R. Willoughby* (Clark).

4843. **Kühne, F.** *Carl Gustav Carus und Ludwig Klages.* (Carl Gustav Carus and Ludwig Klages.) *Polit. Erziehung*, 1933, 2, 110-115.—The significance, spiritual relationship and contrasts of the two thinkers are presented. Mind and body are for Klages radically sundered; Carus on the contrary considers body, soul and mind to constitute an inseparable unity.—*F. Trogisch* (Leipzig).

4844. **Lewis, C. I.** *Experience and meaning.* *Phil. Rev.*, 1934, 43, 125-146.—Lewis considers the demand, now widely current, that any concept considered or any proposition asserted must have a definite denotation; if one fails to find empirical exemplification, his concept must be regarded as meaningless and his proposition as non-significant. In particular, he considers the logical positivists of the Vienna circle, who repudiate all problems of traditional metaphysics and normative science, and criticizes them from the point of view of James, Peirce and Dewey. He points out that if the logical positivists in their development of a methodological solipsism demand that all objects known must be constructed or defined exclusively in terms of sense-data actually given to the subject at the moment when the knowing takes place, then there is no possibility of genuine knowledge and no reality of empirical meaning. But pragmatism avoids this conclusion by pointing out that "knowing is a matter

of two 'moments,' the moment of assertion or entertainment and the moment of verification; both of these moments belong to experience in the generic sense of that word. Knowledge will be true or correct only in so far as the present experience—of the entertainment of the meaning—envisages or anticipates correctly the experience or the experiences which would verify it; that is, our knowledge is true if the anticipated experience is genuinely to be met with." For pragmatism, "knowing begins and ends in experience; but it does not end in the experience with which it begins." But it insists that the entertaining experience can be truly cognitive only if it is distinguished from the moment of its verification.—*C. B. Shaw* (Boston University).

4845. **Louttit, C. M.** *An historical note on the application of psychology.* *J. Appl. Psychol.*, 1934, 18, 304-305.—A method of literary criticism and confirmation of disputed writings based on Locke's doctrine of association of ideas published in 1794.—*R. S. Schultz* (Psychological Corporation).

4846. **Lundholm, H.** *Conation and our conscious life. Prolegomena to a doctrine of urge psychology.* *Duke Univ. Psychol. Monog.*, No. III. Pp. 95.—This treatise is based on three postulates: (1) that mind and body are different in nature but functionally interrelated; (2) that mental activity is primarily purposive; (3) that conscious guidance of mental activity is present on all levels of animal life. Conation is the alternative term for adaptive mental process and it is reflected in the cycle of waxing and waning alertness to which all living beings are subject. This cycle is regarded as a purposive alternation of two distinct primordial impulses, those of curiosity and sleep. During evolution several levels of conation are differentiated: (1) the first, hypothetical, pre-neural level, represented in an organism in which the two primordial and one single directed secondary conation are differentiated; (2) the second pre-neural level, actually observed and represented by two secondary reactions in addition to the primordial impulses; (3) the neural level of well-developed instinct. Memory transcends the life course of the individual, the reality of instinctive organizations presupposing such transcendence. Activation of the individual memory continuum is subject to the law of affinity of cognitive dispositions: any disposition to think a past conation is prone to become activated whenever the secondary impulse is again at work which originally urged the latter. Any psychological object such as the memory of a conative cycle of the individual's past guides behavior in so far as it is an object of belief.—*R. Smith* (Clark).

4847. **Lungwitz, H.** *Lehrbuch der Psychobiologie.* (A text book of psychobiology.) (3 vols.) Kirchheim N.-L.: Brücke Verlag, 1933. Pp. 1733. RM. 50.—Psychobiology deals with the biological structure and function of the nervous system, including the cortex as the organ of consciousness. All so-called psychical processes are biological processes, but not in the sense emphasized by the Russian conditioned-reflex theories. Subjects treated include life and

death, the here and the hereafter, man and God, space and time, motion, gravity, etc., atomic and electronic theory, ethics, esthetics.—*H. Lungwitz* (Berlin).

4848. Maddox, E. E. *The swinging stereoscope*. *Amer. J. Ophth.*, 1934, 17, 149-150.—A description of an instrument designed to introduce motion in squint training.—*T. Karwoski* (Dartmouth).

4849. Mazzoni, G. *L'intelletto umano*. (Human intelligence.) Milan: Soc. Ed. "Vita e Pensiero," 1932. Pp. 260.—The book is an exposition of the Thomist doctrine on intelligence, discussed in harmony with the exigencies of modern mentality and present-day preoccupations and written in the philosophical language of our day.—*R. Calabresi* (Rome).

4850. Muse, M. B. *A textbook of psychology*. (3rd ed.) Philadelphia: Saunders, 1934. Pp. 469. \$2.50.—This edition differs from the previous one in that it includes a discussion of modern schools of psychology, a section on personality, new material on the psychological significance of endocrine functions, and several new illustrations. The text is written for nurses, hence the tests and exercises at the end of each chapter draw upon nursing experience in its psychological aspects. Several experiments at the end of each chapter are designed to give the student practical insight into psychological experimentation without requiring any elaborate apparatus.—*N. L. Munn* (Pittsburgh).

4851. Nier, F. *Menschenkunde als Philosophie des Leibes*. (The science of man as a philosophy of the human body.) *Polit. Erziehung*, 1933, 2, 105-110.—The fruitless struggle between Kant's philosophy of consciousness and the mechanism of the 19th century was resolved by Friedrich Nietzsche. Man is not a duality of the physico-animal and the mental-moralistic; nor is he a creature of causality. Belief in certain values is determined by racial factors whose influence finds expression in the form of human will.—*F. Trogisch* (Leipzig).

4852. Osborn, A. D. *Some recent German critics of phenomenology*. *J. Phil.*, 1934, 31, 377-382.—The phenomenology of Husserl can be understood only in the light of its development, since it grew out of controversy and criticism. Husserl had objected to Schröder's *Lectures on the Algebra of Logic* as not being logic at all, but only a calculus. Frege gave a damaging criticism of Husserl's position, accusing him of substituting psychology for logic. Husserl did not reply, but spent several years in reconstructing his views. The result was his *Logical Investigations*, which criticized the error of psychologism, analyzed the meaning of meaning, developed a new theory of universals and a theory of categorical intuition, and foreshadowed his "phenomenology." He made converts but aroused keen criticism. Logicians considered him a psychologizer and psychologists considered him a doubtful ally. Recent critical discussions form an important body of philosophical literature. Clems, Zocher, Kraft, Illemann, and Weidauer have contributed important books. All agree as to the sig-

nificance and value of Husserl's phenomenology. English-speaking countries have, however, been backward in entering the discussion.—*E. T. Mitchell* (Texas).

4853. Pillsbury, W. B. *The fundamentals of psychology*. (3rd ed.) New York: Macmillan, 1934. Pp. xii + 663. \$2.75.—The general purpose of the preceding editions of the book has been retained, the approach being an eclectic one. The volume has been expanded by the inclusion of new facts and new points of view; a special chapter on characteristic schools of psychology concludes the book. The section on nervous processes has been retained and is treated rather fully at the beginning.—*D. Shakow* (Worcester State Hospital).

4854. Portenier, L. *The psychological laboratory at the University of Wyoming*. *Psychol. Exch.*, 1934, 3, 63-64.—*J. F. Dashiell* (North Carolina).

4855. Reich, O. *Das Qualitätsproblem der Psychologie und seine Lösung. Eine musikpsychologische Abhandlung*. (The problem of quality in psychology and its solution. A treatise on the psychology of music.) Prag: Selbstverlag, 1933. Pp. viii + 139. RM. 3.—The author attempts to get at a solution of the problem of quality, which has not been worked out sufficiently in psychology. A critical investigation of the basis, presuppositions, and important results in the psychology of the senses is made, for example of tone quality, with special reference to the tone psychology of Stumpf. The investigation is then extended from tone quality to sensation quality in general. The writer comes then to a biological formulation of his problems, and deals with the biological utility of our experiences and of consciousness. He derives a primitive "primary experience" (*Urerlebnis*) and its qualities in its biological relations and significance referring to facts of psychology and biology. Finally he attempts to show step by step the genesis of our complicated conscious life by assuming a development of this *Urerlebnis* and its functions.—*O. Reich* (Prag).

4856. Sargentich, S. *Conduct and behavior: a study*. *U. S. Vet. Bur. Med. Bull.*, 1934, 10, 229-233.—The author distinguishes between conduct as being the expression of instincts, and behavior as being reactions in which external causes play the most important part. Conduct and behavior may deviate either in the way of excess or deficiency from the normal state. The author relates such deviations on a four-point scale to psychiatric conditions.—*C. M. Louttit* (Indiana).

4857. [Various.] *Clark University thesis abstracts, 1933 (Vol. V)*. Worcester: Clark University Press, 1933. Pp. 172.—Including abstracts of seven masters' dissertations in psychology: Robert J. Beitel, Jr., *Spatial Summation of Threshold Stimuli in the Periphery of the Retina*; Robert H. Brown, *Flicker and the Stationary State*; Elaine K. Foraker, *An Examination of Differences in Sensory Responses Which May Be Considered to Modify the Individual's Place in Social Phenomena*; Charlotte E. Hall, *The Position of the Paranoids in the Schizophrenic Group*; Sidney

H. Newman, *An Experimental Study of the Application of the Spearman-Brown Formula to Learning Material*; Gertrude Raffel, *The Effect of Recall on Forgetting*; J. Roy Smith, *Synchronization of Discharge in the Optic Pathways*.—R. Smith (Clark).

4858. Varvel, W. A. A Gestalt critique of purposive behaviorism. *Psychol. Rev.*, 1934, 41, 381-399.—An analysis of the differences between Tolman's system and Gestalt psychology. Tolman's system is objected to as an unsuccessful attempt to reconcile atomistic behaviorism with organismic purposivism. The following specific points are made: (1) it cannot rid itself of dualism; (2) it begins with parts and regards organization and unity as derived properties, which is the reverse of Gestalt; (3) it supposes two kinds of behavior, molar and molecular, but fails to explain directional behavior in molar terms; (4) while recognizing unity and field structure, it nevertheless deals not with field properties but with discrete capacities; (5) it distorts Gestalt psychology by identifying it with "stimulus" psychology, and by describing as "Gestalt-like" such principles as the "law of fusion," which presupposes the primacy of parts.—A. G. Bills (Chicago).

4859. Zeddies, A. Was ist Psychologie? (What is psychology?) Bad Homburg v. d. H.: Siemens. (Blaue Siemensreihe. H. 11.) RM. 1.75.—R. R. Willoughby (Clark).

[See also abstracts 4922, 5034, 5043, 5102.]

#### SENSATION AND PERCEPTION

4860. Armstrong, E. L. The optic angle in relation to strabismus. *Amer. J. Ophth.*, 1934, 17, 291-296.—This article is based on a study of 66 fetuses. The angle of the optic nerve was measured, in situ, after the brain and the roof of the orbit were removed. When the angle formed at the chiasma by the optic nerves is plotted against the total body length in cm. it is seen that the convergence of the optic nerves is a continuous process extending from the latter part of the first month of pre-natal life until some time after birth. The process of convergence of the eyeballs seems to be quite variable in individual cases, and it is possible that certain cases of strabismus may be explained on the basis of this variation. The fallacy of the outstanding theories of strabismus lies in the fact that the angle of the optic nerves at the chiasma has not been considered. The angle of the optic nerves is usually indicated by the inter-pupillary distance. When this angle falls within the range of 66 to 70°, there is no strabismus; when it is narrower, convergent strabismus is induced; when wider, divergent strabismus.—T. Karwoski (Dartmouth).

4861. Beacher, L. L. Symptomatology of glare. *Amer. J. Optom.*, 1934, 11, 272-274.—R. J. Beitel, Jr. (Clark).

4862. Best, H. Blindness and the blind in the United States. New York: Macmillan, 1934. Pp. xxii + 714. \$6.50.—A revision of *The Blind: Their Condition and the Work Being Done for Them in the United States*, with added material on prevention of

blindness. It is believed that 72% of all blindness in the United States is preventable. There is only a slightly greater chance of a child being congenitally blind when a parent is blind. The proportion of blind with blind relatives is over three times as great among those whose parents are cousins as it is among the blind as a whole. The point of greatest eugenic significance is in the marriage of persons blind because of specific diseases or of sighted persons with relatives blind therefrom. The total annual cost of blindness in the United States is about 40 million dollars. Only 7.7% of blind persons over ten years of age are self-supporting. The history of the care of the blind shows the tendency to favor establishing day rather than boarding schools where possible; the extension of home teaching and of compulsory education; building up of regional libraries; and the creation of blind commissions. Industrial establishments are of inestimable value to those employed, but of limited practical use, since the maximum number able to work is but 32,000. Some form of pension is the only means of general relief. The one really scientific solution is the plan of indemnification, preferably through insurance policies, for loss of sight. This book is amply illustrated with tables showing the cause, extent and distribution of blindness.—M. P. Montgomery (Faribault, Minn.).

4863. Brinkmann, D. Der Einfluss der Blendung auf das Erkennen farbiger Lichtsignale. (The influence of glare upon the recognition of colored light signals.) Zürich: Kreutler, 1934. Pp. 95.—R. R. Willoughby (Clark).

4864. Bruner, A. B. Malingering tests. *Amer. J. Ophth.*, 1934, 17, 490-496.—The author describes and evaluates the various tests used by ophthalmologists to detect malingering.—T. Karwoski (Dartmouth).

4865. Brunner, H. Zur Differentialdiagnose der traumatischen Taubheit. (Differential diagnosis of traumatic deafness.) *Acta otolaryngol.*, 1934, 20, 180-183.—A case is given of a 51-year-old woman who had been diagnosed traumatic deafness following an automobile accident. At autopsy ten years later, she showed a meningitis with subdural abscess and necrosis of the dura. It was attributed to an acute stage in a chronic otitis. Four differential diagnoses are offered for traumatic deafness.—M. B. Mitchell (New Hampshire State Hospital).

4866. Costa, A. Tatto analitico e tatto sintetico nella valutazione di grandezze e di forme. (Analytical and synthetic touch in the estimation of magnitudes and shapes.) *Arch. ital. di psicol.*, 1934, 12, 81-122.—The author carries the distinction between analytic and synthetic touch from the conceptual field (Braille reading, the comprehension of an object) over to the strictly perceptual field, and finds: (1) over-estimation in analytic touch; (2) under-estimation in synthetic touch; (3) compensatory fusion thereof, which brings a concrete tactual perception very near in regard to size and shape to the visual perception, so as to justify a fundamental analogy between the spatial perceptions in the two



sensory fields.—R. E. Schwarz (V. A. Facility, Northampton, Mass.)

4867. Costa, A. Di alcune modalità percettive di chiarore colori e lucentezza in rapporto con sensazioni tattilo-cinestetiche concomitanti. (Some perceptual modalities of brightness, colors and luminosity, in relation to concomitant tactual-kinesthetic sensations.) *Arch. ital. di psicol.*, 1934, 12, 123-131.—The author reports some typical perceptual variations in vision, especially with regard to color, brightness and luminosity in relation to concomitant tactual-muscular-kinesthetic variations.—R. E. Schwarz (V. A. Facility, Northampton, Mass.)

4868. Dietze, A. Die Beeinflussung der Schwelle eines Momentanreizes durch die Anzahl, Gruppierung, Stärke und Beachtung gleichzeitiger Nebeneize. (Influences upon the threshold for a momentary stimulation by the number, arrangement, strength and attention given to simultaneously present adjacent stimulations.) Leipzig: Psychophys. Seminar d. Univ., 1934.—A small circular field was fixated. Surrounding this field were six separate areas, all within easy vision, and each capable of independent (tachistoscopic) illumination. One of these was at each exposure the "main stimulus" but of this fact the subject was ignorant. The purpose of the experiment was to determine the threshold of stimulation for this "main" point. Each exposure consisted of several (2-6) illuminated points; controls of only the "main" point were interspersed throughout the series of presentations. There were in all 18 combinations in which the "main" point and certain of the others together constituted various patterns. There were also variations of intensity in the different points. Concentrated attention upon the adjacent points brought about a higher threshold for the "main" point; this was true also when complex patterns were used. Barely visible adjacent points tended to lower the threshold for the "main" point; subliminal adjacent points did not change this threshold. There were noticeable individual differences as regards influences exerted by the adjacent stimulus points.—W. Wirth (Leipzig).

4869. Doane, H. C. The clinical significance of differences in the relative size and shape of ocular images. *Trans. Amer. Acad. Optom.*, 1933, 8, 117-133.—The author presents data on 80 cases examined and corrected for aniseikonia. "The existence of aniseikonia may be the cause of ocular and general symptoms; the correction of aniseikonia has afforded definite relief in a large percentage (66%) of corrected cases. The prevalence of this condition and its relation to visual comfort is greater than is generally realized."—R. J. Beitel, Jr. (Clark).

4870. Dunstan, W. R. Variation and refraction. *Brit. J. Ophthalm.*, 1934, 18, 404-410.—"Unhappily, it has been assumed that if frequency distributions of refractive error be restricted to cases showing no pathological element then such distributions will follow the normal curve of error." "An overwhelming majority of biometric distributions yield a moderately asymmetrical curve, and refractions are no exception

to this rule." "Errors of refraction considered as material for the study of variation may serve to draw attention to the unexplored field of clinical anthropometry." Illustrative tables and graph are presented.—R. J. Beitel, Jr. (Clark).

4871. Ferree, C. E., & Rand, G. The testing of visual acuity. I. Factors in the sensitive use of the test for the detection of errors of refraction. *Amer. J. Ophthalm.*, 1934, 17, 29-36.—T. Karwowski (Dartmouth).

4872. Ferreri, G. Il problema dei sordomutismi e la collaborazione fra gli educatori dei sordomuti e i medici specialisti. (The problem of deaf-mutism and the collaboration of educators of deaf mutes and medical specialists.) *Scuola dei sordomuti*, 1933, 8, 3-13.—After stressing the reasons for a close collaboration between medical specialists and educators of deaf mutes, the author gives a new classification of the deaf who are susceptible to scholastic education and stresses the harm which may result from a delay in their admission to specialized schools.—R. Calabresi (Rome).

4873. Ferreri, G. La fonetica sperimentale e l'istruzione orale dei sordomuti. (Experimental phonetics and oral instruction for deaf mutes.) *Scuola dei sordomuti*, 1933, 8, No. 2. Pp. 10.—Recent observations in the field of phonetic experimentation confirm several beliefs which the author has advanced in the past in regard to phonetic education of deaf mutes. In particular the following points should be emphasized: the importance of stressing from the very beginning the matter of phonetic unity by the use of very simple syllabic compounds; the importance of the position and the reciprocal influence of pre- and post-tonics; the influence of the individual phonetic process on expression from the psychological and affective points of view; the necessity of developing in the deaf mute an ability to read lip movements, etc.—R. Calabresi (Rome).

4874. Freystadt, B. Studien über Oberflächenanästhesie. (Studies on superficial anesthesia.) *Acta otolaryngol.*, 1934, 20, 235-254.—The anesthetic which can overcome the greatest resistance has the greatest penetrating capacity. The resistance of the body varies in different parts. It is least in the isolated parts such as the peritoneal cavity and becomes greater and greater in the following order: mucous membrane of the urethra and bladder, cornea, mucous membrane of the nose, pharynx and larynx, tongue, lip, tympanic membrane, and surface of the normal skin. The sensations disappear in this order: cold, touch, pain and warm. Cocain and tutocain proved relatively ineffective compared with alypin, percain, pantocain, and psicain N. An ointment form produced the best results because the length of application was more important than the concentration. For instance, an 8% solution of watery pantocain was effective when applied for 20 minutes, while a 1% ointment of percain or pantocain was effective.—M. B. Mitchell (New Hampshire State Hospital).

4875. Fritz, M. F. Incidence of color blindness at Iowa State College. *Proc. Iowa Acad. Sci.*, 1932,

39, 243-244.—The Ishihara test for color blindness was given to 2163 students. A higher percentage of defective color vision was found among men than among women and a higher percentage among freshmen students than graduate students. A possible negative relationship between color blindness and mental ability is suggested. More than half of the students were wholly unaware of their difficulty. There seem to be degrees of color weakness rather than color blindness as an all-or-none affair.—B. Wellman (Iowa).

4876. Goldstein, M. A. *Problems of the deaf*. St. Louis: Laryngoscope Press, 1933. Pp. 580. \$6.00.—"The main purpose in the presentation of this book is to record my personal experiences in the study, pedagogy and individual research of the past forty years with children and adults handicapped by deafness or defects in speech." The author includes in this volume a sketch of the chronological history of deafness, two chapters on the anatomy and physiology of the speech and hearing mechanisms with illustrations; one chapter on each of the following: functional tests of hearing, mentality tests, classification of the different types of deafness, speech defects and their correction; two chapters on special methods of teaching the deaf child and the training of teachers. In addition the value of lip-reading for both the deaf child and the deafened adult is discussed. The author also discusses the responsibilities of physicians in regard to the deaf child and advises parents of deaf children concerning their problem. The book contains tabulated records of all the schools for the deaf in the United States and a digest of all state laws affecting the deaf, compulsory education, the location of all schools, the number of pupils, and the names of executive officers. In addition, there is a brief statement of the national associations concerned with the welfare of the deaf and periodicals published in the interest of the deaf. Finally, the author adds some of the results of his personal research in the problems of the deaf.—C. V. Hudgins (Clarke School).

4877. Haas, —. [Size of images of an object brought near by the different states of static refraction on subjects without glasses and on subjects wearing glasses.] *Rev. d'opt.*, Sept., 1933.—R. J. Beitel, Jr. (Clark).

4878. Hartmann, G. W. *Comparison of the flicker thresholds in children and adults*. *Child Development*, 1934, 5, 122-126.—"Thirty young school children and thirty adults were measured in standard psychophysical fashion with respect to the rotary velocity required to extinguish flicker effects produced by (1) black and white disks, and (2) yellow and blue disks, combined in equal proportions. No significant differences between the thresholds for the two age groups were found." The limen for the males was consistently higher than for the females.—F. D. McTeer (Wayne University, Detroit).

4879. Hayes, S. P. *Factors influencing the school success of the blind*. *Teach. Forum (Blind)*, 1934, 6, 91-99.—The author compares results of data

secured from tests given in ten schools for the blind with those previously published by Pechstein, and finds himself at variance on several points. As to the cause of blindness and its effect upon school work, Pechstein found that the best work was done by those accidentally blinded. The author finds no difference between the work of those accidentally blinded and those congenitally blind. As to degree of blindness, both authors find that those with a little vision do the poorest work. They are less expert in finger movements than the totally blind or nearly blind. Pechstein found that early incidence correlated with poor school standing. The author does not find that those blinded early are inferior in test results, nor do they show the anticipated effect of lack of imagery. Several tables appear, with median scores on several tests, including one which gives the group tests in which children early blinded are superior, equal, or inferior to those blinded later in life. The author also takes exception to Pechstein's statement that age at entrance is not important, as he finds that the best scores were made in his tests by those who entered at the lowest ages. Pechstein found boys slightly superior to girls in school work, while the author finds no significant differences between boys and girls tested.—S. M. Stinchfield (Southern California).

4880. Horton, H. S. *A mid-life imbalance phenomenon*. *Amer. J. Optom.*, 1934, 11, 240-243.—The author describes a type of ocular myologic imbalance which is found in men between 40 and 70 years of age. The clinical signs, in their most complete form, are: "the loss of single, binocular vision in which the patient cannot hold either a distance or a near target singly. There is no combination of prisms which will allow single vision. There is also that type which has diplopia at near, and that which has diplopia at distance only." Discussion of possible etiology and treatment follows.—R. J. Beitel, Jr. (Clark).

4881. Hughson, W., Crowe, S. J., & Howe, H. A. *Physiology of the ear*. *Acta otolaryngol.*, 1934, 20, 9-23.—An analysis of about 700 experiments performed in the otological research laboratory of the Johns Hopkins Medical School indicates that the method of Wever and Bray gives reliable results in the study of the physiology of the ear. A new method of producing localized lesions of the cochlea by drilling and cauterizing is described briefly.—M. B. Mitchell (New Hampshire State Hospital).

4882. Imhofer, H. *Die Gehörsausschaltung durch Übertäubung in der Therapie der Krankheiten der Stimme und Sprache*. (The disfunctioning of hearing through deafening in the therapy of diseases of the voice and speech.) *Acta otolaryngol.*, 1934, 20, 145-149.—Some cases of deafness occurred during the treatment of diseases of the voice and speech. Their organic basis was questioned; in some cases, at least, they seemed to be functional.—M. B. Mitchell (New Hampshire State Hospital).

4883. Kern, G. *Motorische Umreissung optischer Gestalten*. (Motor disruption of visual configurations.) Munich: Beck, 1933. Pp. 69.—R. R. Wiloughby (Clark).

4884. Kurtz, J. I. A case of functional bilateral ptosis. *Amer. J. Optom.*, 1934, 11, 227-231.—R. J. Beitel, Jr. (Clark).

4885. Kurtz, J. I. A comparative study of refraction with and without a cycloplegic. *Amer. J. Optom.*, 1934, 11, 248-271.—The author refracted 65 subjects (young men, ages 18 and over), performing a skiascopic and subjective test, first without using a cycloplegic; then the same tests were made using a cycloplegic, and the results compared. The following conclusions are drawn: (1) there is more disagreement between the retinoscopic and subjective findings under a cycloplegic refraction than between the same findings made in a manifest refraction; (2) the findings of a cycloplegic refraction are no more accurate than those of a manifest refraction; (3) in most cases more accurate findings are obtained in a non-cycloplegic than in a cycloplegic refraction. Commenting on the "use of a cycloplegic from a psychological standpoint" the author stresses another objection to the use of cycloplegics in refraction, viz., the form of micropsia that obtains under atropine. Tables and charts are presented.—R. J. Beitel, Jr. (Clark).

4886. Larsen, H. Om dobbeltsyn og dets diagnostiske betydning. (Diplopia and its diagnostic significance.) *Ugeskr. f. læger*, 1934, 96, 647-651.—After discussing the different manifestations of diplopia, the writer concludes: "Every case of diplopia may signify that the patient has a serious general ailment; it should be emphasized that diplopia is never a hysterical symptom, but an objective disorder."—V. Coucheron-Jarl (Mooseheart Laboratory for Child Research).

4887. Liebig, F. G. Über unsere Orientierung im Raume bei Ausschluss der Augen. (Our orientation in space without the use of the eyes.) *Zsch. f. Sinnesphysiol.*, 1933, 64, 251-282.—In a large dark room the subject was shown a point on the opposite side of the room indicated by a beam of light. He was blindfolded, and the experimenter either led him or conveyed him in a small wagon to a different part of the room. The subject was then required to point toward the spot previously shown to him. A number of subjects were used and pronounced individual differences were found. Orientation was more accurate when the subject was led, i.e., walking the distance himself, than when he was conveyed in the wagon; it was likewise more accurate when the path traversed by the subject was a straight line than when it was curved or irregular. Orientation was further tested by requiring the subject to walk back to the starting point. Results for this part of the experiment confirmed the findings of the first part.—M. Murphy (Pennsylvania).

4888. Luckiesh, M. Seeing and human welfare. Baltimore: Williams & Wilkins, 1934. Pp. 190. \$2.50.—A brief and non-technical presentation of a new branch of science which has become known as the science of seeing. This popular treatise is based upon a series of psychophysiological researches extending over a period of two decades. Seeing is presented as an activity of body and mind which utilizes

human resources just as any other task does. Hence the viewpoint of vision is extended into the activity of seeing which involves the entire human organism, its behavior, efficiency, and welfare. Therefore, the science of seeing becomes an important branch of social science in which parents, employers, school authorities, the medical profession, and social workers may further extend their services in the realm of seeing. This new viewpoint is perhaps even more important to those who exercise a general control over the visibility of objects. Among these are oculists, optometrists, lighting specialists, architects; also producers of light sources, lighting equipment, paint, paper and printing. The author clearly establishes the fact that modern science possesses the knowledge and has produced the means for improving seeing. That penalties are paid for poor conditions for seeing is charged to the general lack of a seeing consciousness. This book and the researches upon which it is based also reveal new vistas of research for psychologists.—M. Luckiesh (General Electric Co., Cleveland).

4889. Mackenzie, R. A peculiar visual experience. *Nature*, 1932, 130, 885-889.—R. R. Willoughby (Clark).

4890. Martin, A. H. Light pressure contact. *Australas. J. Psychol. & Philos.*, 1934, 12, 150-151.—The experiment on tactual and kinesthetic perception of form in the manual by Langfeld and Allport was modified and extended. Modifications were devices for improving the contact of figures with the skin and for confining kinesthetic sensation to a single joint. The extension was to an experiment on "spatial discrimination of touch versus kinesthesia." With the improved method a very striking superiority of kinesthetic perception over touch was demonstrated. Vierordt's law was found to hold for human beings, but it is pointed out that it fails with animals because "it takes no account of evolutionary factors."—H. D. Spoerl (Boston).

4891. McFadden, F. Mechanical experiments to reproduce the functions of the extra-ocular muscles. *Amer. J. Optom.*, 1934, 11, 244-247.—The author has prepared a mechanical model to simplify the factors in extra-ocular muscle function. The model allows the eyes to be swung "from side to side in unison with their direction wires parallel, but by withdrawing the plunger at the rear of the model the act of convergence is effected, while the globes may also be swung from side to side in the manner of reading across the page."—R. J. Beitel, Jr. (Clark).

4892. Needles, W. B., & Heather, W. J. Preliminary report on an optometric survey of delinquent children at the Chicago Parental School. *Amer. J. Optom.*, 1934, 11, 199-211.—308 inmates of the Chicago Parental School for Delinquent Children were examined. The investigation, aside from that of oculo-refractive errors, comprised inquiries into (a) general biological development; (b) visual defects other than actual pathology, and (c) general and ocular pathology. "The group shows, outside of refractive errors, no larger percentage of defective stigmata than any group taken at random. It does



show a percentage of refractive errors more than 35 per cent higher than the general percentage." Some of the results and conclusions are summarized as follows: (1) "the refractive status of the eye does apparently have some relation to the biological development; (2) the plurality of hyperopia in the defective group supports the belief that the normal development of the eye is from a state of hyperopia to one of emmetropia, which the under-developed child falls short of achieving; (3) the high percentage of refractive errors (93 per cent) indicates that refractive errors have some relation to delinquency; (4) under abnormal biological conditions, myopes manifest very poor ability to maintain orthophoria, probably because of the neurotic qualities of their biologic type." Tables are presented.—*R. J. Beitel, Jr. (Clark).*

4893. O'Brien, C. S., & Aalit, P. W. *Chemistry of the lens.* *Amer. J. Ophthalmol.*, 1933, 16, 863-880.—Bibliography of 80 references.—*T. Karwoski (Dartmouth).*

4894. Ornstein, —. [Unity of light or standardized method of measurement.] *Rev. d'opt.*, Oct., 1933.—*R. J. Beitel, Jr. (Clark).*

4895. Pine, H. E. Amblyopic treatment technics. *Amer. J. Optom.*, 1934, 11, 221-226.—Specific case reports with procedures used and results obtained are presented.—*R. J. Beitel, Jr. (Clark).*

4896. Riggs, L. A., & Karwoski, T. Synaesthesia. *Brit. J. Psychol.*, 1934, 25, 29-41.—A case of synesthesia observed in a young child is described, and other child studies are cited for comparison. The content of synesthesia is classified as proceeding from (1) accidental association, (2) affective value, (3) unusual clearness of the subject's imagery, (4) strong activity of the thought processes. Two developmental characteristics are common to all cases of synesthesia: (1) its childhood origin, (2) its development according to pattern. The first shows that there is primitive, undifferentiated sensory experience before the senses have begun to operate independently, and thus the spontaneous synesthetic experience occurs until differentiation is complete. The second explains the later development of the phenomenon. The strength of this configuration appears to be a function of (1) strength of content (as determined by clearness of imagery), (2) strength of assimilating process (as determined by intelligence).—*M. D. Vernon (Cambridge, England).*

4897. Sinha, J. *Indian psychology: perception.* London: Kegan Paul, 1934. Pp. xvi + 384. 15/-.—An exposition, with a good many references to relevant western literature, of the views of Indian thinkers about the nature of the sense organs, and of the varieties of perception which are based upon their stimulation.—*F. C. Bartlett (Cambridge, England).*

4898. Smith, A. F. R. Auditory fatigue. *Brit. J. Psychol.*, 1934, 25, 77-85.—Auditory fatigue is taken to be "that decrease in sensitivity which follows upon continuous stimulation of the hearing mechanism, manifesting itself as a decreased response to a stimulus

of constant physical intensity, and . . . therefore an increase in the physical intensity of the stimulus required to produce a given response." An apparatus was constructed which gave a stimulating sound of good wave form, stable frequency, and intensity which could be easily varied over long ranges. Little effect was found with fatiguing tones of 400 and 500 cycles; but with one of 2000 cycles, 100 decibels above the threshold, a slight effect was produced at 1000 cycles, a threshold rise of 7 to 50 decibels at 2000 cycles, and one of 10 to 56 decibels at 4000 cycles. These results seem to agree with the hypothesis advanced by Davis and Saul.—*M. D. Vernon (Cambridge, England).*

4899. Spiller, G. *The problem of the sensations. (A summarized statement.)* London: Farleigh Press, 1934. Pp. 16.—The following topics are considered: (1) the classification of sensations; (2) the sense organs; (3) sensory stimuli, sensory contact or media, sensory nerves, and sensory brain areas; (4) attention as a factor in sensing; (5) the place of experience; (6) needs as the organizing factor; (7) relativity in sensations; (8) reduction of the diverse classes of sensations to one class.—*H. W. Karn (Clark).*

4900. Spittler, H. R. Optical control of the central gray. *Amer. J. Optom.*, 1934, 11, 212-220.—A discussion of the utilization of selected light frequencies as stimuli to re-establish normal relationships among the "associated and supportive functions of vision." Case reports are appended.—*R. J. Beitel, Jr. (Clark).*

4901. Stevens, S. S. Tonal density. *J. Exper. Psychol.*, 1934, 17, 585-592.—It was the purpose of this experiment to determine whether density might be a discriminable aspect of tonal stimuli, different from volume, pitch and loudness. That density is a discriminable aspect of tonal stimuli is indicated by the ease with which observers are able to equate in density two tones which differ in pitch by changing the intensity of one of the tones. Computation shows that the average coefficients of variation of the equation of two tones for density are larger than the coefficients of the equation of two tones for intensity, and the coefficients for density are approximately equal to the corresponding coefficients for volume. The form for the contour for equal density, as plotted against frequency and intensity, shows that the observers did not confuse density either with loudness or with volume. The physiological basis of the experience of tonal density is discussed.—*H. W. Karn (Clark).*

4902. Stock, B. Über die symmetrische haptische Einstellung von Raumpunkte. (The symmetrical haptic indication of points in space.) *Zsch. f. Sinnesphysiol.*, 1933, 64, 229-250.—The experiment determined with what accuracy, when a point in space was tactually perceived with one hand on one side of the median plane of the body, the subjects could indicate with the other hand the symmetrical point on the opposite side of the median plane of the body. There were two series of experiments: in the first the hands were in the normal position, in the second they were

crossed. Great quantitative differences exist between different subjects. The results showed greater accuracy when the point was in the accustomed part of the field of touch. There was no difference in the accuracy of the two hands and no improvement appeared with practice. When the hands were crossed the points indicated as symmetrical were too near the median plane of the body.—*M. Murphy* (Pennsylvania).

4903. Tait, W. J. An experimental investigation of the negative fusional convergence amplitude. *Trans. Amer. Acad. Optom.*, 1933, 8, 155-167.—Using 4 selected subjects, an attempt was made to develop the negative fusional convergence amplitude by means of orthoptic calisthenics. Analysis of the data revealed that base-in prism calisthenics were more successful in increasing the neuro-muscular response of the adductive amplitude than in effecting any material change in the abductive reserve. This is contrary to the current conceptions.—*R. J. Beitel, Jr.* (Clark).

4904. Van Gilse, P. H. G. Expérimentations suivant la méthode de Wever et Bray après lésion de la cochlée. (Experiments following the method of Wever and Bray after a lesion of the cochlea.) *Acta otolaryngol.*, 1934, 20, 23-31.—The right cochlea of three cats were experimentally injured. The method of Wever and Bray was then applied to both sides. Sounds were transmitted and recorded with the help of a string galvanometer. The records were clear for the left side, but indistinct and in some cases entirely absent on the operated side. The post-mortem histological examinations confirmed the destruction indicated by the lack of transmission.—*M. B. Mitchell* (New Hampshire State Hospital).

4905. Vitale, S. Le malattie professionali dell' orecchio con particolare riguardo alla funzione uditiva. (Professional diseases of the ear in relation to auditory function.) *Giorn. di med. milit.*, 1933, 81, 378-388.—The author, after a review of works on professional diseases of the ear and on deafness in particular, discusses the reasons which prevent the formulation of definite judgments regarding the dependence of lesions on certain occupations and, in particular, of deafness which certain noises cause in the organ of hearing. He describes the immediate causes of these disorders, analyzes the mechanism used in determining them, and gives a synthetic description of the principal symptoms, the curative methods, and means of prophylaxis. Through his consideration of auricular lesions which are dependent upon certain kinds of work in relation to the possibility of their modification or abatement, the author believes that indemnification should be temporary in a first attack.—*R. Calabresi* (Rome).

4906. Vivian, W. O. The distribution of the tonic reciprocal innervation to the extra-ocular muscles in over two thousand clinical patients. *Trans. Amer. Acad. Optom.*, 1933, 8, 168-175.—2172 cases were tabulated for the distant phorias and 2095 cases for the near point. The subjects were, in all cases, patients who had been previously carefully refracted

and corrected and who had no apparent ocular discomforts or difficulties. Graphically, an outstanding modal curve was obtained from the distance findings, 39% of all the subjects having orthophoria. 78% of the cases fell in "what may be termed the area of greatest distribution," which varied to 2 prism diopters on either side of orthophoria. On the other hand, the near point graph showed a definite regularity of distribution over the whole possible area. "The distribution of the near point data is characteristic of the type of scatter obtained in any large group in the measurement of the effects of learning processes. This leads to the conclusion that accommodative-convergence is the result of a learning process and that the amount of the reflex has no relation to ocular efficiency or comfort."—*R. J. Beitel, Jr.* (Clark).

4907. Wedell, C. H. The nature of the absolute judgment of pitch. *J. Exper. Psychol.*, 1934, 17, 485-503.—Experiments are described the results of which lead to the following conclusions: (1) Relatively unmusical observers can learn to increase their accuracy in assigning pitch numbers to pure tones. (2) The greatest increase in ability takes place during the first few practice sessions. (3) The limit of ability reached in this experiment was an average error of about three semi-tones. (4) The course of the learning process is irregular, and there are large individual differences. (5) Unmusical observers can learn accurately to recognize tones that are eight and one third semi-tones apart, but they fail to learn to judge the tones correctly when the interval is decreased to five and one half semi-tones or less. (6) Observers build up a subjective scale in which they can place unfamiliar tones as accurately as familiar ones. (7) Contrary to previous findings, the greatest average error in the present experiments was made in identifying tones from the middle of the scale, the size of the error gradually decreasing toward the ends.—*H. W. Karn* (Clark).

4908. Weld, L. D. Some observations on spectral color discrimination. *Proc. Iowa Acad. Sci.*, 1932, 39, 209-211.—38 observers were asked to designate the wave-length boundaries between spectral colors. The average deviation for 21 males was greater than that for 17 females, but the two smallest deviations were for males. It is thought probable that the means or medians obtained represent what may be regarded as the most logical positions of the spectral color boundaries.—*B. Wellman* (Iowa).

4909. Whipple, R. R. Artificial illumination for the pre-school laboratory. *Child Development*, 1934, 5, 97-106.—After a discussion of the general factors to be considered in the installation of any artificial illumination, the author applies these principles to a reorganization of the lighting of the pre-school laboratory of the Iowa Child Welfare Research Station.—*F. D. McTeer* (Wayne University, Detroit).

4910. Wohlwill, H. E. Typische Verhaltensweisen im Wahrnehmen. (Typical attitudes in perceiving.) Hamburg: Schimkus, 1933. Pp. 92.—These experiments were made with 44 subjects in 3 different sensory fields. In the visual experiments 2 rotating

gray disks were used, of which the right one was constant and strongly illuminated, the left variable and weakly illuminated. In the tactile experiments a scale of 10 little emery plates of varying roughness covered with a silk-paper were compared with a constant uncovered plate of a medium roughness. In the acoustic experiments a pendulum stroke of constant intensity was compared with a stroke of variable intensity, the latter obscured by a noise produced by a noise variator. The following two attitudes were examined: (1) Analytic attitude: comparisons made by the greatest possible abstraction from the obscuring medium (illumination, silk-paper, noise). (2) Totalizing attitude: comparisons made under the influence of the medium. Some of the subjects were more successful under the first condition, some under the second. In this way the author distinguishes the analytic type from the totalisation type. A third type, the shifter, can change his attitude according to the instruction. The author lays emphasis upon the similarity between the attitudes of the individual subjects in free and experimental situations.—*E. Wohlwill* (Hamburg).

[See also abstracts 4848, 4919, 4942, 4943, 4967, 4976, 4982, 4983, 5075, 5094, 5165, 5200, 5321.]

#### FEELING AND EMOTION

4911. Bard, P. On emotional expression after decortication with some remarks on certain theoretical views: Part I. *Psychol. Rev.*, 1934, 41, 309-329.—A review of the experimental studies on emotional behavior in decorticated animals, and of Bard's special studies in which varying portions of the brain stem were ablated, following decortication, supports the view that the hypothalamus, not the thalamus or other structures, determines the pattern of expression of the emotions. Harlow and Stagner are criticized for quoting Bard's work to support the theory that the thalamus is the excitement center. Practically all parts of the sympathetic outflow can be made to discharge by localized hypothalamic stimulation, but not by stimulating the thalamus. Recent work of Dusser de Barenne and Sager with local applications of strychnine support this. So also do the quite different results from decerebrate (i.e. mesencephalic transection) preparations such as those of Keller, as contrasted with decorticate preparations. Harlow and Stagner are criticized for not distinguishing between the *experience* of emotion and the *motor expression* of emotion to which these results apply, and for maintaining that there are no distinctive patterns of motor expression for the different emotions.—*A. G. Bills* (Chicago).

4912. Link, H. Zur Histopathologie der Pseudowut. (On the histopathology of sham rage.) Osterwargau am Taubenberg: Hohenhaus, 1933. Pp. 27.—*R. R. Willoughby* (Clark).

[See also abstracts 4938, 5327.]

#### ATTENTION, MEMORY AND THOUGHT

4913. Bonte, T. Die eidetische Anlage und ihre Bedeutung für Erziehung und Unterricht. (The

eidetic disposition and its significance for education and instruction.) Leipzig: Barth, 1934. Pp. viii + 179. RM. 10.—In the introductory part nature, phenomenology, typology, methods of investigation and spread of the eidetic disposition are presented. The principal part is based upon the author's observations and experiments in a grammar school at Hamburg with regard to the significance of eidetic images for the intellectual and characterological make-up of the pupils. Author discusses the question how far the eidetic disposition can be utilized for better achievement in the various school subjects (reading, verbal expression, spelling, arithmetic, drawing, etc.). The results showed that pupils with eidetic disposition make use of the visual eidetic images to a large extent in their school work. The eidetic images play a very significant role also in the every-day life of these persons. The author's opinion that there is no correlation between eidetic disposition and general intelligence is confirmed by this investigation.—*T. Bonte* (Hamburg).

4914. Claparède, E. La genèse de l'hypothèse: étude expérimentale. (The genesis of hypothesis: an experimental study.) *Arch. de psychol.*, 1933, 24, 1-155.—Intelligence is the capacity to solve, with the aid of thought, new problems. The mental process which constitutes an act of intelligence comprises three main operations: the question, the hypothesis, and the verification of the hypothesis. The present study is designed to determine the manner in which the hypothesis is arrived at, i.e., when the mind is faced with a problem, how do the ideas arise which lead to the solution? The author used the "réflexion parlée" (thinking aloud) method: the subject was asked to think aloud, and the experimenter noted what was said. The problems to be solved were as follows: the subject had to find titles for comic pictures; he was shown the first picture of a series of pictures forming a story and had to find the next picture; etc. The thinking was found to take a zigzag course, leaping from observation to hypothesis, back to observation, etc., but throughout the process the experimenter was able to determine a definite pathway consisting of the following stages: perception, reading, inference, and trial and error. First, the mind tried to "read" whatever was placed before the subject, and certain hypotheses were given immediately; but when the reading was not sufficient to suggest an hypothesis, the mind tried to infer, to deduce. If the inference failed, the subject tried trial and error, either at random or under direction, and as a result of this process certain ideas were aroused through association which served as hypotheses. The process of the formation of the hypothesis itself eluded consciousness, for although consciousness is an apparatus both of prevision and of control, it is not a machine for executing work. Consciousness is a deviser of plans, not a laborer. Claparède emphasizes the dynamic and directing action of the "question." He discusses his results in the light of the constellation theory, the theories of Selz, Gestalt psychology, Duncker, Maier, etc. None seems to cover all the facts, although each explains certain aspects. He also examines the phe-



nomenon of implication, which he considers to be a primary adjustment process and not the result of a repetition of experiences.—*M. R. Lambercier* (Geneva).

4915. Cook, T. W. **Massed and distributed practice in puzzle solving.** *Psychol. Rev.*, 1934, 41, 330-355.—One method of approach to a more fundamental classification of the factors conditioning the efficiency of massed versus distributed practice is to relate such factors to the total pattern of the learning process. Present-day theories of learning are returning to a dualistic view in which intelligent learning, or insight, is contrasted with mechanical habit fixation. This two-type theory leads to the following a priori deductions: (1) Intelligent learning should be favored by massed practice immediately after the appearance of a configuration, while the mechanical fixation process is favored by distributed practice. (2) The relative efficacy of the massed practice is inversely proportional to the stability of the novel configuration. (3) Meaningful material should be learned by massed, and nonsense material by distributed practice. (4) Massed learning should be most effective in the early stages of learning; also for immediate recall as against delayed recall. (5) The relative effectiveness of massed versus distributed practice depends on the complexity of the problem, and (6) on the intelligence and past experience of the subjects. The author performed two experiments to test these hypotheses, using the "T" and "cross" puzzles, and found that massed practice was much more economical on the early trials, but its superiority declines with each succeeding trial up to 9 trials.—*A. G. Bills* (Chicago).

4916. Fernberger, S. W. **How we remember.** *Scient. Mo.*, 1934, 39, 56-59.—Emphasis is laid upon overlearning and upon formation of associations.—*J. F. Dashiell* (North Carolina).

4917. Jaensch, E. R. **Die Eidetix und die typologische Forschungsmethode in ihrer Bedeutung für die Jugendpsychologie und Pädagogik, für die allgemeine Psychologie und die Psychophysiologie der menschlichen Persönlichkeit.** (Eidetic imagery and the methods of typological investigation in their significance for adolescent psychology and pedagogy, for general psychology, and for the psychophysiology of human personality: (3rd. ed.) Leipzig: Quelle & Meyer, 1933. Pp. 89. RM. 3.00.—*R. R. Willoughby* (Clark).

4918. McGeoch, J. A. **Learning and retention of verbal materials.** *Psychol. Bull.*, 1934, 31, 381-407.—244 titles are listed in a review of material appearing since 1930. Many topics are covered in a systematic way under the heads: general theory, experimental work on learning, and experimental work on retention. General tendencies pointed out are: a greater concern for methodology and technique; and a change from the older search for "true" and isolable constants to a relativity attitude that views phenomena as multiply conditioned variables that are to be studied in correlation with their conditions.—*J. F. Dashiell* (North Carolina).

4919. Smith, M. D. **The reproduction of colour patterns.** *Brit. J. Psychol.*, 1934, 25, 63-76.—In learning to reproduce different colored patterns with draughtsmen, it was found that the preference for presentation and reproduction of the pattern as a whole or in four consecutive sections depended upon the character of the pattern, i.e., asymmetrical patterns were more difficult when presented in sections, but symmetrical ones easier. Learning was ultimately dependent upon the individual's ability to create "learning units" on the basis of the meaningful relationships in the presented material, and to enlarge these until they included the complete pattern.—*M. D. Vernon* (Cambridge, England).

4920. Waters, R. H. **The law of effect as a principle of learning.** *Psychol. Bull.*, 1934, 31, 408-425.—A review of 73 titles canvasses the criticisms of Thorndike's original statement of the law as grouped into (1) criticisms of the retroactive working of the effect, (2) criticisms of the philosophical implications, (3) questions as to the precise effective conditions, and (4) challenges of its universal validity. (1) and (3) are given more attention here; and attention is called to a wealth of theoretical suggestions and the need in the immediate future for more crucial experimentation.—*J. F. Dashiell* (North Carolina).

[See also abstracts 4829, 4939, 4947, 4976.]

#### NERVOUS SYSTEM

4921. Alexandrov, I. S. [Functional modification of the cortex in the course of work.] *Arkhh. biol. nauk*, 1932, 32, 364-375.—Diminution of cortical activity during work in the dog is indicated by an inhibition of certain conditioned reflexes. Moreover, such reflexes disappear more rapidly during work than normally.—*H. E. Burt* (Ohio State).

4922. Brown, C. W., & Henry, F. M. **The central nervous mechanism for emotional responses: II. A technique for destroying the deeper nuclear regions within the cerebrum with a minimal destruction of the intervening cortex.** *Proc. Nat. Acad. Sci.*, 1934, 20, 310-315.—The present paper describes a technique for obtaining controlled destruction within the deeper nuclei of the cerebrum with a minimal destruction of the intervening cortex by means of a localized application of radio frequency current. The unit is now being used to study various other phases of response besides emotion. There is a schematic diagram of the high frequency unit in the text.—*W. N. Hallett* (Cedar Crest).

4923. Gertler, H. **Ueber den Einfluss des Gehirns auf die Rückenmarkstätigkeit des Frosches.** (Regarding the influence of the brain upon activity of the spinal cord in frogs.) Dingelstadt Eichfeld: Verlag Joseph Heinvetter, 1933. Pp. 21. RM. 0.50.—The brain impedes action in all muscular reactions of the fore-limbs of frogs: movements such as bending arms, brushing aside obstacles, flight and defense were studied. There are, however, no centers of inhibition within the brain except that a slightly decreased inhibition in the scratching reflex may be noted after removal of the rear brain section. The

frog's threshold for stimulation is lowered in this case. A gradual destruction of brain matter does not involve a corresponding increase of sensitivity. The mode of reaction of the spinal cord is not determined by the amount of brain substance present, but by the specific influences of the individual brain parts.—*H. Gertler (Jena)*.

4924. **Ivanov-Smolenski, A. G.** *Osnovnye problemy patofiziologii vysshey nervnoy deyatel'nosti*. (Fundamental problems of the pathophysiology of the higher nervous functions.) Moscow-Leningrad: Medgiz, 1933. Pp. 574.—The book is divided into two parts. The first part deals with problems of pathophysiology of the paleoencephalon and organic disorders. The second deals with problems of pathophysiology of the neoencephalon and functional disorders. Functional disorders are accounted for largely by the various reflexological concepts of disequilibrium of conditioning mechanisms.—*G. H. Razran (Columbia)*.

4925. **Leese, C. E., & Einarson, L.** *Conduction time in the afferent tracts of the spinal cord in relation to the flexion reflex*. *Amer. J. Physiol.*, 1934, 109, 296-302.—"The reflex time in the flexion reflex, measured by the appearance of the action current in the motor nerve, is compared with the time of arrival of the first electric response in the medulla oblongata, arising from the same stimulus applied to the popliteal nerve. The measurements, made with a high speed recording system, taken in connection with peripheral conduction velocities measured by previous workers, appear to indicate a reduced reflex time of about 2  $\sigma$ . The first response in the medulla appears about 6.5 $\sigma$  after the stimulus, and probably involves more rapidly conducting afferent fibers than those involved in the flexion reflex. The total response in the medulla suggests a fairly wide distribution of individual conduction velocities. Even assuming the reduced reflex time for flexion to be as long as 4  $\sigma$ , it is concluded that the motor neurones discharge in this defensive reflex before the first sensory impulses could reach the cortex in the intact animal."—*C. Landis (N. Y. Psychiatric Institute)*.

4926. **Levin, G. Z.** [The so-called "monkey sulcus" in the brains of Russians and brains of outstanding people.] In *Pines, L., Problema Borozd i izvilin v morfologii mozga*, 25-33. Leningrad: Gosudarstvennii Inst. po Izucheniyu Mozga, 1934.—Rudinger's suggestion on the occurrence of the so-called "monkey sulcus" in the human brain and its atavistic significance acts as an investigation basis for the author, who investigated 100 hemispheres from the Institute collection. The bearers of these brains died from non-psychiatric conditions (infections, TBC, etc.). Most of them were laborers and farmers of different sexes and ages; all, however, were Russians (*velikoross*). Practically all the brains were fixed in formalin. The sulcus lunaris was found in the left hemisphere in 37%; in the right hemisphere in 35%. The brains of academicians Bartold, Koni, Prof. Gatzuk, actor Zakushniak, chemist Mendeleeff, Slozoff, Filipchenko, economist Ziperovitch, academicians Shimkevitch, and Sternberg, the chemist,

were also examined. Altogether 20 hemispheres were studied. The sulcus lunaris was found to be strongly developed in the brains of academician Koni (both sides), Bartold (right side), Mendeleeff (both sides), etc. Altogether it was found in 14 hemispheres out of 20. The author concludes that the sulcus lunaris does not appear less frequently in intellectually outstanding people than in unselected collection. The presence of the sulcus lunaris thus is not a sign of a morphologically under-developed brain.—*I. M. Altshuler (Detroit, Mich.)*.

4927. **Parker, G. H.** *The prolonged activity of momentarily stimulated nerves*. *Proc. Nat. Acad. Sci.*, 1934, 20, 306-310.—"A nerve when severed from its center and momentarily stimulated is supposed to respond by momentary activity. Such momentary activity does not seem to characterize chromatophoral nerves, for, when cut, they remain active for many hours or days. This condition is illustrated in the responses of the melanophore nerves in the caudal fins of many bony fishes. The nerve fibers have long been known to be of autonomic origin. Such fibers are non-medullated. Nerve fibers concerned with pain, fibers that are known to be medullated, may show more or less continuous functional activity not unlike that described for the melanophore nerves. Moreover, Adrian has identified post-operative discharges from mammalian medullated nerves. Probably many nerves, medullated as well as non-medullated, may remain more or less continuously active for long periods after their severance from their centers." There are five figures in the text.—*W. N. Hallett (Cedar Crest)*.

4928. **Pines, L.** [The description of the brain of *V. M. Bekhterev*.] In *L. Pines, Problema Borozd i izvilin v morfologii mozga*, 49-69. Leningrad: Gosudarstvennii Inst. po Izucheniyu Mozga, 1934.—A short characterization of Bekhterev's personality is given. He is described as an outstanding man with a wide horizon, great will power, sober, realistic, alert. He had an uncanny gift of observation and a fine critical temperament, and an exceptional memory. He was foreign to music and art, but had a literary talent, wrote poems. Bekhterev lived seventy-one years. Findings of the brain: weight 1720 grams; a considerable filling of the sinuses of the dura with blood; slight cloudiness of the pia; the arteries sclerotic, especially the basilar; right posterior communications larger than left; brain pink in color, convolutions large and well developed; no atrophy, no impressions; brain large and well developed, while the parietal and occipital portions show convolutions which are smaller and richer in number. The most complicated development of smaller convolutions is in the frontal lobes. There is also some atrophy noticeable in this portion. The atrophy is commensurable with the age. Sulci all over the brain are deepened. Left hemisphere shows more complicated structure of convolutions and sulci than right. No signs of senile atrophy.—*I. M. Altshuler (Detroit, Mich.)*.

4929. **Pines, L.** [The morphology of the brain of the chimpanzee.] In *Pines, L., Problema Borozd*

i izvin v morfologii mozga, 183-202. Leningrad: Gosudarstvennii Inst. po Izucheniyu Mozga, 1934.—The morphology of the brain, the development of convolutions and sulci offer some insight as to the relationship between the chimpanzee and man. Twelve hemispheres from chimpanzees served as material for this study. There are individual peculiarities in the brain of the chimpanzee which make it differ from the brain of the lower forms of apes. The asymmetry and variability of the sulci and convolutions in the brain of the chimpanzee shows that it is closer to man than to lower forms of apes. Another factor which shows the relationship between the brain of the chimpanzee and man is a similar general structure, with the exception of the outer surface of the occipital lobe. There are, however, other characteristics in the chimpanzee which differ from those of man and show closer relationship to the lower forms of apes. More anthropological data are still necessary to draw positive conclusions.—*I. M. Altshuler* (Detroit, Mich.)

4930. Uttl, K. Přispěvek k histologii mimokorových center. (A contribution to the histology of the subcortical centers.) *Rev. v neur. a psychiat.*, 1933, 30, 216-225.—*S. H. Newman* (Clark).

[See also abstracts 4830, 4911, 4936, 4955, 4958.]

#### MOTOR PHENOMENA AND ACTION

4931. Asmussen, E., & Lindhard, J. Potential-schwankungen bei direkter Reizung von motorischen Endplatten. (Variations of potential with direct stimulation of motor end-plates.) *Biol. Meddel.*, 1933, 11, No. 1. Pp. 31. 1.50 Danish crowns.—Action-current experiments upon muscle preparations of lizards revealed curves of the usual form; the average variation of potential was approximately 25 microvolts.—*J. Lindhard* (Copenhagen).

4932. Benjamins, C. E. Die Rolle des Kehlkopfs beim Schlucken. (The role of the epiglottis in swallowing.) *Acta otolaryngol.*, 1934, 20, 142-144.—A motion picture film of a patient with carcinoma of the larynx shows the action of the epiglottis during swallowing. It completely covers the entrance to the larynx, thus protecting the air passages from food.—*M. B. Mitchell* (New Hampshire State Hospital).

4933. Betts, E. W. Time limit vs. work limit in learning. *Ment. Meas. Monog.*, 1934, Serial No. 10. Pp. 58.—This investigation is a study of the relative influence of the time-limit versus the work-limit method on the quality and quantity of work accomplished. Using high school girls as subjects and a specially devised pattern completion test as work material it was found that on the average there is no significant difference between ratings for the same individual by the time-limit and work-limit methods, although the latter method has slightly greater value than the former in raising the rank of an individual and in decreasing individual differences.—*R. Smith* (Clark).

4934. Blank, G. Brauchbarkeit optischer Reaktionsmessungen. (Reliability of visual reaction time measurements.) *Indus. Psychotechn.*, 1934, 11, 140-150.—Using 30 subjects 43,000 visual reaction time measurements were taken, part simple, part choice. Both types of reaction showed a decrease with practice. The relation between the reaction time and the number of stimuli of a choice reaction set-up was logarithmic. Fractionating the data and running correlations between successive groups indicated that for a reliable measure of simple reaction 200 measurements should be taken and the average of the last 100 used. In the case of choice reactions, the average of the last 100 of 150 measurements is most representative.—*H. J. P. Schubert* (Transient Bureau, Buffalo).

4935. Buytendijk, F. J. J. Wesen und Sinn des Spiels. Das Spielen des Menschen und der Tiere als Erscheinungsform der Lebenstrieb. (The nature and meaning of play. The play of men and animals as a manifestation of the drives of life.) Berlin: Kurt Wolff, Neue Geist Verl., 1933. Pp. 165. RM. 3.20.—Starting with the concrete example of the play of children and young animals, the fundamental characteristics of the adolescent in his dynamic relation to his environment are investigated. From this the situation of play and the real dynamics of play are developed. The play is a manifestation of the drive to independence and to contact with the environment, and is the way to vital knowledge. The principal drives to play are the drive to freedom in connection with self-assertion, the drive of negation manifesting itself as an impulse to destroy both subject and object, and the drive of repetition connected with pleasure. In Buytendijk's book the results of Gestalt psychology and of the doctrine of biological wholes are also considered.—*D. Plessner* (Groningen).

4936. Cantelle, P. G. Effetti sul labirinto degli interventi sul simpatico cervicale. (The effect on the labyrinth of surgical interference on the cervical sympathetic.) *Valsalva*, 1933, 9, 593-610.—The author describes the condition of the anterior and posterior labyrinth in three human subjects after an operation on the pericarotid sympathetic and the removal of the plexus of Haller; and also the condition of a fourth subject in whom the superior cervical ganglion had been removed.—*R. Calabresi* (Rome).

4937. Davis, R. C. Modification of the galvanic reflex by daily repetition of a stimulus. *J. Exper. Psychol.*, 1934, 17, 504-535.—Seven experiments were undertaken to study the habituation of the galvanic reflex and body resistance to repetitions of various types of stimuli. The following stimuli showed a decreasing effect during a five-day period: a noise while the subject was engaged in work or while he was resting, a ready signal which was to be followed by stimulation, and the onset of music. During mental work there occurred a slower reaction lasting throughout the period of work. This remained constant throughout the five-day period. Reaction to a piece of classical music, aside from the reaction at



its onset, increased over a period of five days. Instruction to a group to increase their output of mental work caused a marked increase in the reaction accompanying the work. Initial resistance regularly showed an increase over a five-day period. It is suggested that a reaction occurred before each sitting began, and that this diminished in size with successive repetitions. A control group showed a drop in resistance during a period comparable to the period of stimulation in other groups. This drop decreased in five successive sittings. The decrease is interpreted as habituation to incidental stimuli. Several hypotheses regarding determining factors for increasing and decreasing responses are discussed.—*H. W. Karn (Clark)*.

4938. **Frommann, F.** *Das psychogalvanische Phänomen und seine typologische Bedeutung.* (The psychogalvanic phenomenon and its typological significance.) Tübingen: Höhn, 1932. Pp. 65.—*R. R. Willoughby (Clark)*.

4939. **Goldstein, H.** *A biochemical study of the metabolism of mental work.* *Arch. of Psychol.*, 1934, No. 164. Pp. 57.—The program was to determine whether the metabolic changes, as measured biochemically, of a 3-hour period of cancelling A's differs significantly from the metabolic changes of a 3-hour period of more difficult mental work, such as taking the Thorndike CAVD Intelligence Scale, levels M and Q. Mental work per se exercises no positive influence on metabolic activity, as determined by the methods employed in this investigation. It is difficult to separate mental work from muscular work; the organism reacts as a whole to any situation. The physiological cost of mental work with a minimal physical component is insignificant compared to the physiological cost of mental work with an overt physical component. Since mental effort does not appear to produce any significant influence, as determined in the present study, upon total metabolism of the organism, it is probable that the explanation of fatigue after mental effort must be sought in the brain itself. In tasks involving mental work with an overt physical component, an increase of the physical component results in greater metabolic change, and increase of the mental component without increase of the physical component does not result in greater metabolic change, as determined by methods of this experiment. In tasks involving mental work with a minimum physical component, metabolic change does not differ significantly from that which occurs during "no work."—*E. M. Achilles (Columbia)*.

4940. **Hill, L.** *The limit of high flying when breathing oxygen.* *Proc. Roy. Soc. London*, 1934, 115B, 298-306.—Experiments on monkeys and men. When breathing oxygen loss of consciousness occurs if barometric pressure falls to about 115 mm. Hg. Acute oxygen want occurs in monkeys, goats, guinea pigs, rats and pigeons when pressure falls to about 85 mm. Hg. If 5% or less oxygen is breathed at high barometric pressure, acute oxygen want occurs when the partial pressure of oxygen in the lungs falls to about

38 mm. Hg. Some of the symptoms of oxygen want are described.—*F. C. Bartlett (Cambridge, England)*.

4941. **Huizinga, E.** *Experimentelle Untersuchungen am Bogengangapparat der Taube.* (Experimental research on the semi-circular canals of the pigeon.) *Acta otolaryngol.*, 1934, 20, 76-102.—The loss of the posterior ampulla in the pigeon, if it is removed carefully, will not result in loss of function. The semi-circular canals can be divided into three systems: a horizontal and two crossed vertical ones. Violent reactions such as pendulum movements of the head result only when two corresponding canals are excised. This reaction is due to heavy loss of tonus of the neck muscles; the amount can be tested objectively by the application of weights. In pigeons, strong continual reactions originate from the cristae.—*M. B. Mitchell (New Hampshire State Hospital)*.

4942. **Iakowleff, C.** *La chronaxie chez les aveugles.* (Chronaxy of the blind.) *Trav. humain*, 1934, 2, 204-208.—Average chronaxy of flexors and extensors of the fingers is less for the blind than for the seeing (100 individuals in former group and 50 in latter). Variability is greater in the blind. It is smaller in the hand the subject uses in reading Braille. Where the degree of blindness is not complete, differences between the two hands correlate with the comparative blindness of the two eyes.—*H. E. Burt (Ohio State)*.

4943. **Kleschtschow, S.** *Phylogenetische Vorstufen des musikalischen Gehörs. 3. Einfluss der Veränderung des Reizrhythmus auf die bedingt-reflektorische Nerventätigkeit.* (Phylogenetic antecedents of musical hearing. 3. Influence of change in stimulus rhythm on the conditioned-reflex nerve activity.) *Zsch. f. Sinnesphysiol.*, 1933, 64, 177-191.—Using the time reflex as developed in Pavlov's laboratory, the author found that by reducing the time interval the strength of the salivary reflex was increased, while increasing the time interval reduced the salivary reflex.—*M. Murphy (Pennsylvania)*.

4944. **Kneeland, N.** *Self-estimates of improvement in repeated tasks.* *Arch. of Psychol.*, 1934, No. 163. Pp. 75.—The program was to study an individual's ability to estimate his own improvement in a given task. Self-estimates in three simple tasks dependent largely on speed of perception and motor skill—cancellation, scribbling, and knot tying—were studied. The subject performed the task, scored his first performance, and repeated the task as many times as desired, estimating before and after each repetition the amount of improvement anticipated or actually made. There was a general tendency to estimate moderate improvement—an average estimate of 17% (range 7-26) of original score for second and third trials, 35% (range 28-49) for the goal. There was a general tendency to raise estimates in successive trials. Post-estimates were more accurate than pre-estimates. A tendency was noted in post-estimates to compensate or correct for under- or over-estimation of the pre-estimates. Knot tying stood out as a type of performance more nearly allied to every-day experience. The process of estimation depended on nine factors: the apparent possibility of improvement in

the given task, the size of the original score, changes in method of performance during the task, the emotional attitude of the subject towards the task, the set of the estimator established at the beginning of the experiment, familiarity with the task and with the estimating procedure, the type of estimate to be made, the nature of the task to be performed, and the individual making the estimate.—*E. M. Achilles* (Columbia).

4945. **Kraskin, L. H.** A study of factors entering into the determination of handedness. *Trans. Amer. Acad. Optom.*, 1933, 8, 26-31.—A fact-finding study on the incidence and degree of handedness in 4 representative cross-sections of the normal group, viz., infants, kindergarten children, 6th grade children, and adult college students. The following conclusions were drawn: (1) Handedness is manifested in varying degrees in different individuals, and the age of the subjects does not affect the degree of its manifestation. The curve of distribution for handedness is slightly skewed to the left. (2) Handedness and intelligence are probably unrelated. (3) Some of the data would tend to support the theory that handedness is an inherited quality. (4) Handedness is not affected by the prenatal environment as it is determined by the dominant position of the fetus, by the presentation position of the child, by the basal metabolism of the mother, or by the birth weight of the child. (5) About 81% of people show greater native ability with their right than with their left hand as indicated by the tapping test, whereas approximately 96% learn to use their right hand preferentially as indicated by the number marking test. "In other words, 75% of those who have greater native ability in their left hand as indicated by reaction time (tapping test) develop preferential use of the right hand presumably due to the effect of living in a right-handed world."—*R. J. Beitel, Jr.* (Clark).

4946. **Lebedinski, A. W.** [Contribution to the study of the sense of equilibrium.] *Fiziol. zh. U.S.S.R.*, 1933, 16, 457-459.—The usual technique tilts the subject a given amount and then restores him to the vertical, whereupon he reproduces the tilt. The present study starts from an inclined position rather than the vertical. The judgments are a function of this initial angle and also follow Weber's law somewhat.—*H. E. Burt* (Ohio State).

4947. **Lorge, I., Eisonson, J., & Epstein, B.** Further experiments in the strength of connections where the connection is punished or rewarded or neither punished nor rewarded. *J. Exper. Psychol.*, 1934, 17, 412-423.—Experiments are described the results of which may be viewed as supporting the earlier findings of Thorndike and Lorge: "in learning, where the subject has no opportunity to react to a punishment by immediately changing his response, the learning is a function of rewards and not of punishments."—*H. W. Karn* (Clark).

4948. **MacCurdy, J. T.** Disorientation and vertigo, with special reference to aviation. *Brit. J. Psychol.*, 1934, 25, 42-54.—Vertigo is produced when the labyrinth is diseased, i.e. when the body is physio-

logically disoriented; and by disorientation under normal conditions when: (1) the individual is so much distracted by giddiness and nausea, or by efforts to maintain balance, as to make visual judgment ineffective, (2) objects are viewed with difficulty because they are in motion, or at some unfamiliar angle, (3) perception is inaccurate because its posture-balance component is absent or distorted. These three conditions may be acute but temporary, and may be compensated for by the use of an intellectually produced substitute perception. They occur during learning to fly. Nausea and vomiting appear to be produced by reactions of the abdominal muscles to sudden changes in the magnitude and direction of gravitational forces, and can be avoided by completely relaxing these muscles.—*M. D. Vernon* (Cambridge, England).

4949. **McNally, W. J., & Tait, J.** Function of the utricular maculae of the frog. *Acta otolaryngol.*, 1934, 20, 73-76.—When seven of the eight receptors of the labyrinth on each side were rendered functionless by nerve section, the frogs could maintain any natural anine posture. When they began to move, however, they suffered pendulation of the body. When vision and the utricular maculae are eliminated, the frogs cannot make compensatory movements to change of posture. The utricular maculae respond differently to slow tipping than to quick tipping. Frogs with only two utricular maculae removed cannot land during a fall like a normal animal.—*M. B. Mitchell* (New Hampshire State Hospital).

4950. **Negus, V. E.** Cinematograph film to demonstrate the activity of cilia. *Acta otolaryngol.*, 1934, 20, 71-72.—The film shows the activity of cilia in various animals and the effect of various drugs upon them.—*M. B. Mitchell* (New Hampshire State Hospital).

4951. **Otis, A. S.** Learning to glide. *J. Appl. Psychol.*, 1934, 18, 197-208.—The author describes his experience in learning to glide at Rhön, Germany. Observations are reported on the three basic movements of a motorless plane that need to be regulated, namely, balancing (on axis from nose to tail), pitching (regulation of plane downward or upward) and steering.—*R. S. Schultz* (Psychological Corporation).

4952. **Rosenblueth, A., & Morison, R. S.** A quantitative study of the production of sympathin. *Amer. J. Physiol.*, 1934, 109, 209-220.—"With the nictitating membrane as an indicator for sympathin and adrenalin, variable frequencies of maximal stimulation were applied to the cervical sympathetic, the cardio-accelerator and the hepatic nerves separately or simultaneously and the responses thus obtained were compared with those elicited by variable doses of adrenalin. The results obtained were the following. The responses to adrenalin and to cervical sympathetic nerve impulses yield a single curve. The responses to adrenalin and those to sympathin from the heart or the liver yield different curves. The inferences derived from these results are the following. The amounts of mediator liberated on sympathetic nerve stimulation are directly proportional to the

frequency of stimulation. Sympathin differs from adrenine. The data can be explained by assuming sympathin to be a compound of the mediator with the receptive substance."—C. Landis (N. Y. Psychiatric Institute).

4953. Schroeder, L. J. The effect of summer vacation on ability in typewriting. *J. Appl. Psychol.*, 1934, 18, 282-287.—High school pupils with a half year's course in typewriting after a summer vacation tend to improve in speed. Approximately half of the pupils increased in accuracy while the other half decreased.—R. S. Schultz (Psychological Corporation).

4954. Stephens, J. M. The influence of punishment on learning. *J. Exper. Psychol.*, 1934, 17, 536-555.—In attempting to account for the stamping-in influence of punishment, the author found that punishment of the kind used in the present experiment has no uniform stamping-in influence, but that its effects vary with the conditions. For example, when conveyed by one medium (flashing lights) punishment stamps the bonds in as shown by immediate test. When conveyed by another medium (a spoken word) punishment stamps the bonds out as shown by immediate test. The author was also concerned with the suggestion that whenever punishment does strengthen a bond, such strengthening may be due to the incidence of the physical medium by which the punishment was conveyed. Thus the mere fact that "something" happens after a response tends to strengthen the underlying connection; a rewarding something may add to the strengthening influence and a punishing influence detract from it. Experimental findings showed this to be the case. Thus when a signal carrying no information of success (but not ridiculous) is given it has a decided stamping-in effect. When practically the same signal is made to inform the subject that he is right, the strengthening value is enhanced. When the signal informs the subject he is wrong, the strengthening influence is diminished.—H. W. Karn (Clark).

4955. Sumbayev, T. S. [The influence of sympathetomy on the plastic tonus of decerebration.] *Fiziol. zh. U.S.S.R.*, 1932, 15, 336-339.—In cats with extensive abdominal sympathetomy, decerebration produced a hypertonic condition, especially an exaggeration of plastic tonus.—H. E. Burt (Ohio State).

4956. Szász, T. Manometrische Beobachtung des Innenohres während der kalorischen Reizung. Experimente am Tier. (Manometric observations of the inner ear during caloric irritation. Experiments with animals.) *Acta otolaryngol.*, 1934, 20, 31-45.—In both dogs and rabbits, caloric stimulation of the inner ear caused a change in blood pressure. No correlation was found, however, between changes recorded on the manometer in the inner ear and cold or warm caloric stimulation.—M. B. Mitchell (New Hampshire State Hospital).

4957. Varnum, W. Factors influencing the latent time of the patellar reflex. *J. Exper. Psychol.*, 1934, 17, 556-573.—These experiments were concerned with the influence of certain specific and isolable factors

upon the latency of the knee-jerk. The main group of data consists of over 10,000 measurements of knee-jerk latencies made with 36 subjects. The significant findings are as follows: (1) The factor of handedness bears no statistically important relation to knee-jerk latency in the group of subjects examined. The differences between the means of right and left knee-jerk latencies in no case exceeded the probable error of the two means by more than a fraction of a sigma. (2) A comparison of knee-jerk latency under conditions of bodily tension and relaxation showed the following averages: (a) right knee (relaxed),  $63 \pm 0.80 \sigma$ ; (b) right knee (tension),  $58 \pm 0.89 \sigma$ ; (c) left knee (relaxed),  $63 \pm 0.79 \sigma$ ; (d) left knee (tension),  $57 \pm 0.89 \sigma$ . (3) In simultaneously made measures of extent and latency bodily tension inevitably resulted in an increase in the mean extent of the knee-jerk and in a decrease in the mean latency.—H. W. Karn (Clark).

4958. Velicogna, A., & Viziano, A. La cronaxia nel solfocarbonismo. (Chronaxy in sulphur dioxide intoxication.) *Med. lav.*, 1932, 23, 365-372.—Artificial silk workers showed a general decrease, but occasional increase for some muscles. The gas affects sensory and motor nerves about simultaneously, but the former are noticed earlier by the individual.—H. E. Burt (Ohio State).

[See also abstracts 4883, 4920, 4921, 4925, 4968, 5103, 5112, 5165, 5173, 5188, 5280, 5307.]

#### PLANT AND ANIMAL BEHAVIOR

4959. Brand, H. Die lokomotorischen Reaktionen von *Nereis diversicolor* auf Licht und Dunkelheit und der Einfluss von Eingriffen an Rezeptoren, Effectoren und Zentralnervensystem. (The locomotor reactions of *Nereis diversicolor* to light and darkness and the influence of insults to the receptors, effectors, and central nervous system.) *Zsch. f. wiss. Zool., Abt. A*, 1933, 144, 363-401.—R. R. Willoughby (Clark).

4960. Dempsey, E. W., Myers, H. I., Young, W. C., & Jennison, D. B. Absence of light and the reproductive cycle in the guinea pig. *Amer. J. Physiol.*, 1934, 109, 307-311.—It is concluded that exposure to light is not necessary for the existence or maintenance of the reproductive rhythm in at least one poly-oestrous species, the guinea pig.—C. Landis (N. Y. Psychiatric Institute).

4961. Fjeld, H. A. The limits of learning ability in rhesus monkeys. *Genet. Psychol. Monog.*, 1934, 15, 369-537.—17 young *Macacus rhesus* monkeys were tried out in the Jenkins problem apparatus over a period of almost two years. The Jenkins apparatus is so arranged as to make use of "a simple reaction system common to a large number of phyla" and makes possible comparative studies of a great variety of animals. Limits of learning were finally obtained for 14 of the original 17 subjects. The limits attained by the monkeys were markedly superior to those attained in previous experiments by kittens, white rats, and guinea pigs. With regard to the number of steps learned and speed of activity the males were definitely superior to the females; the reverse was true



for scores in trials and errors or for the quadrant-plate ratio. Marked individual differences were noted from one monkey to another. The results showed that the steps in the Jenkins problem apparatus were not of equal difficulty. "No consistent relationship was found to exist between speed of learning and the limit of learning finally reached." A review of the literature in the field is given and 35 references are listed in the bibliography.—F. M. Teagarden (Pittsburgh).

4962. Friedmann, H. The display of Wallace's standard-wing bird of paradise in captivity. *Scient. Mo.*, 1934, 39, 52-55.—The postures are described in words and drawings.—J. F. Dashiell (North Carolina).

5963. Haig, C. The effect of intensity and wavelength on the response of *Avena* to light. *Proc. Nat. Acad. Sci.*, 1934, 20, 296-303.—"When the young seedling of the oat (*Avena*) is exposed to unilateral illumination of moderate intensity, it bends toward the light. *Avena* is one of the many plants which elongate more rapidly when grown in the dark than in the light. The reaction time for positive phototropic responses of *Avena sativa* for short exposures to white light decreases with increasing intensity up to about 100 ml. and then increases. The response curve shows two parts, indicating a double photoreceptor process. The relative sensibility of the tip of the shoot to lights of three different colors is not the same as that of the base. This suggests that the two sensitive regions possess qualitatively distinct photochemical systems."—W. N. Hallett (Cedar Crest).

4964. Hanström, B. Ueber das Vorkommen eines Nackenschildes und eines vierzelligen Sinnesorgans bei den Trilobiten. (On the appearance of a cervical shield and of a four-celled sense organ in the trilobites.) *Kungl. fysiograf. Sällskapets Handl.*, N. F., 1934, 45, No. 7. Also *Lunds Univ. Årsskr.*, N. F., 30, No. 7.—R. R. Willoughby (Clark).

4965. Hull, C. L. The rat's speed-of-locomotion gradient in the approach to food. *J. Comp. Psychol.*, 1934, 17, 393-422.—Hungry rats trained to traverse a runway in which the time spent in each section was automatically recorded manifested, during initial training, an increased speed as the goal was approached. There was in the last section of the runway, however, a marked retardation in speed of locomotion. This final retardation occurred in both a 20-foot and a 40-foot runway. As training continued there was a leveling of the gradient, including the retardation at the end. Composite gradients were obtained by training the animals on a 20-foot section and then on a 40-foot section. Continued training again leveled the contours of the gradient. The speed-of-locomotion gradient which had been reduced by training was revived by removal of the food reward. Gradients which differed somewhat from the original ones and from each other became evident when satiation and frustration techniques were introduced after considerable training had obliterated the contours of simple and compound

gradients. Change from hunger to thirst motivation produced only slight disturbances. The results are regarded as a general substantiation of the author's deductions concerning the goal gradient. A complexity of phenomena not demanded by the hypothesis is also revealed. Inertia characteristic of starting as such and retardation in the final unit are two such phenomena. Bibliography.—N. L. Munn (Pittsburgh).

4966. Koehler, O. Beiträge zur Sinnesphysiologie der Süßwasserplanarien. (Investigations on the sense physiology of fresh-water planarians.) *Zsch. f. vergl. Physiol.*, 1932, 16, 606-756.—A detailed study of the sensitivity of four species of planarians, involving histological examinations and stimulation tests which indicate that tactual, chemical and thermal sensitivity are mediated by different types of peripheral ending. Acuity of these and other types of sensitivity increases in general from anterior to posterior parts. Extirpation experiments showed that the receptors mainly involved in responses to chemical emanations from distant objects are concentrated on the sides of the head, and this modality ("olfaction") decreases abruptly in acuity behind the auricular appendages. "Gustatory" sensitivity is differentiated, and its receptors are particularly concentrated on the antero-medial surface of the body, and on the proboscis. Three species of planarians were found to differ markedly in their chemical sensitivity. Response to food at a distance and food-taking were investigated. Tested in the laboratory, a species (*Planaria alpina*) which lives in swift running streams was found much more sensitive to currents than was a species (*P. lugubris*) which lives in still water. Specimens of the latter species from one locality were not sensitive to currents until after two months spent in running water in the laboratory. Orientation to currents, as well as orientation to chemicals, proved to be phenomena of tropotaxis. The highly stimulative effect of light was found subordinate to the influence of a current of water in controlling the animal's movements. Thermal and tactual sensitivity were also investigated.—T. C. Schneirla (New York University).

4967. Lashley, K. S., & Frank, M. The mechanism of vision. X. Postoperative disturbances of habits based on detail vision in the rat after lesions in the cerebral visual areas. *J. Comp. Psychol.*, 1934, 17, 355-391.—The rats were trained to discriminate between two triangles (one on base and the other on apex). This training was followed by (1) a retention test after 14 days, (2) lesions in the visual areas (except for controls operated in other areas), and (3) further retention tests 14 days after the operation. The lesions were finally reconstructed and the results interpreted. The authors offer the following conclusions: While complete destruction of both striate areas abolishes detail vision, destruction of any limited part of the cortex (adjacent to the striate areas or remote) does not interfere with discrimination. There is no evidence of a visual associative area apart from the area striata. Visual memory

is not conditioned by any other part of the cortex than the projection field for the temporal retina. Lesions in this field may severely disturb the discrimination. Errorless retention is obtained if a part of the cortical representation of either the superior or inferior temporal retina in one hemisphere is intact. One twelfth of the total visual cortex is required for this retention. The trace is not localized in any limited portion of the visual cortex. There is no significant correlation between extent of cortical injury and disturbance of the discrimination. Degree of disturbance depends upon location of the scotomas. There is no evidence for organic amnesia independent of the primary visual defect. Bibliography.—N. L. Munn (Pittsburgh).

4968. Levy, D. M. Experiments on the sucking reflex and social behavior of dogs. *Amer. J. Orthopsychiat.*, 1934, 4, 203-224.—Of six dogs in a litter, four were taken on the sixth day of life and put on bottle feeding. The quantity of milk was controlled, so that all animals maintained the same weight. For 20 days all experimental conditions were constant except sucking time at feeding. One pair, the "long-time feeders," sucked from bottles with small-holed nipples, and were given supplementary sucking. The other pair, "short-time feeders," sucked rapidly from bottles having large-holed nipples. In a majority of tests the short-time feeders showed greater and more prolonged tendency to suck all kinds of objects between feedings. It is suggested that thumb-sucking in infants is similarly related to an incomplete sucking phase of the feeding act. Certain social behavior of the animals is commented upon.—H. Peak (Randolph-Macon).

4969. Morey, R. H. Swimming speed of rats as a function of the presence or absence of sound. *J. Comp. Psychol.*, 1934, 17, 329-354.—The effect of different temporal arrangements of auditory stimulation upon the speed and general nature of swimming was investigated. A straight tank was used in one part of the experiment while a T-maze was used in the other. The animal's body, by crossing a beam of light at the beginning and end of a 10-foot length of the tank, started and stopped a watch. Four conditions of sound stimulation were used. These were: (1) sound during 10-foot swim, (2) sound 5 sec. before swim and continued for 7 feet of swim, (3) sound 8 sec. before swim and continued for 4 feet of swim, and (4) sound 10 sec. before swim with none during swim. The results show that auditory stimulation simultaneous with swimming facilitates the rat's swimming speed and that the degree of facilitation depends upon the duration of stimulation during swimming. The speed of swimming was increased and the number of errors decreased when the animal swam a T-maze with simultaneous auditory stimulation. Swimming of a previously learned maze was also facilitated by auditory stimulation. An hypothesis is offered which attempts to explain the results in terms of physiological processes rather than in terms of attention. Bibliography of 101 titles.—N. L. Munn (Pittsburgh).

4970. Moss, F. A. [Ed.] *Comparative psychology*. New York: Prentice-Hall, 1934. Pp. 529. \$3.50.—The present introductory textbook is a cooperative undertaking with the following order of chapters and authors: E. L. Thorndike, Why study animal psychology? (7 pages.) R. H. Waters, The historical background of comparative psychology. (28 pages.) This chapter reports the history from the Greeks to contemporary times. C. P. Stone, Maturation and "instinctive" functions. (36 pages.) C. P. Stone, Incentives and drives. (40 pages.) F. A. Moss, The effect of drugs and internal secretions on animal behavior. (36 pages.) D. M. Purdy, The functions of the receptors. (40 pages.) P. E. Fields, Discrimination. (30 pages.) S. I. Franz, The neurology of learning. (27 pages.) This chapter reveals some of the differences of interpretation between Lashley and Franz concerning neurological findings and reeducation. H. S. Liddell, The conditioned reflex. (50 pages.) W. T. Heron, Learning. (38 pages.) W. T. Heron, Complex learning processes. (28 pages.) E. C. Tolman, Theories of learning. (42 pages.) This chapter is devoted to a comparison of reflex arc, trial and error, and field theories, the last of which is favored in the form of sign-gestalt. R. C. Tryon, Individual differences. (40 pages.) O. L. Tinklepaugh, Social psychology of animals. (34 pages.) O. L. Tinklepaugh, "Gifted" animals. (28 pages.) All chapters except the first have brief reference lists.—W. S. Hunter (Clark).

4971. Müller, M. *Die zählensprechenden Weimarer Hunde*. (The number-counting dogs of Weimar.) Stuttgart: Richard Jordan, 1934. Pp. 16. Pfg. 40.—The author, a well-known animal anatomist at the University of Munich, has examined the number-speaking dogs of Weimar. Two of the dogs bark the numbers, another taps them out like the dog Rolf of Mannheim, another barks the letters from *a* to *i* with the numbers 1, 2, 3, 4, etc.; and from *k* to *z* he taps with his paws (with the tens on the left and the units on the right). He concludes that we find in animals a mentality which is a function of a highly developed cerebrum.—M. Müller (München).

4972. Riess, B. F. Limits of learning ability in the white rat and the guinea pig. *Genet. Psychol. Monog.*, 1934, 15, 303-368.—35 white rats and 30 guinea pigs were tried out in the Jenkins problem box with its tasks of increasing complexity. The learning limit for rats was found to be higher than for guinea pigs. The guinea-pig scores were slightly more variable than those of the rats. Although the guinea pigs were not able to master Step II they succeeded in learning Step I in fewer trials and errors and in less time than the rats. The guinea pigs proved to be the more sensitive to extraneous stimuli. The limits for these rodents were found to be exceedingly low as compared with those of kittens and of rhesus monkeys. The monograph gives a bibliography of 19 titles.—F. M. Teagarden (Pittsburgh).

4973. Schneirla, T. C. Raiding and other outstanding phenomena in the behavior of army ants. *Proc. Nat. Acad. Sci.*, 1934, 20, 316-321.—Several

varieties of ants of the genus *Eciton* are considered. The behavior of the "swarm raiders" and the "column raiders" is carefully described. Various colony activities other than raiding are treated. There are two figures in the text.—W. N. Hallett (Cedar Crest).

4974. Spence, K. W., & Shipley, W. C. The factors determining the difficulty of blind alleys in maze learning by the white rat. *J. Comp. Psychol.*, 1934, 17, 423-436.—In a linear maze consisting of two groups of homogeneous blind alleys, the goal-pointing blinds were found to be three times as difficult to eliminate as the non-goal-pointing blinds. There was evidence, up to the ninth trial, of a backward order of learning. In the latter part of learning, the order changed to a forward one. Anticipation of the final correct turn is regarded as the most likely explanation of this behavior. Considering the non-goal-pointing blinds as a group, the earlier blinds were more difficult than the later ones, but there was not a perfect backward order of elimination. The results agree with Hull's habit-family hierarchy hypothesis. Bibliography.—N. L. Munn (Pittsburgh).

4975. Tolman, E. C. Backward elimination of errors in two successive discrimination habits. *Univ. Calif. Publ. Psychol.*, 1934, 6, No. 9, 145-152.—This work is a repetition of an experiment reported by Rose in 1931. In substantiation of Rose's results, learning records of four white rats indicate that of two successively placed discrimination boxes, one nearer the goal than the other, the way through the one nearer the goal will be learned first.—J. R. Smith (Clark).

4976. Verlaïne, L. L'odorat et la généralisation, le relatif et l'absolu chez les guêpes. (Olfaction and generalization, relative and absolute, in wasps.) *Bull. et ann. Soc. entom. de Belgique*, 1932, 72, 311-322.—When wasps are forced to choose between a perfumed liquid and one which is not perfumed, they choose the former regardless of the kind of perfume used if the perfume is agreeable to them; thus they make generalizations for odors just as they do for visual perceptions. If a certain perfume is constantly opposed to different ones, they choose the former, regardless of the manner of presentation. Having to choose between two intensities of the same perfume, the wasp is guided first of all by the relativity of the two, that is to say, by the greater or lesser amounts of perfume used; whatever the level may be, the wasp is able to acquire quite quickly an absolute awareness of a given intensity of a particular perfume.—R. Nihard (Liège).

4977. Verlaïne, L. L'instinct et l'intelligence chez les hyménoptères. Le soi-disant instinct de désoperculation chez les guêpes. (Instinct and intelligence in Hymenoptera. The so-called instinct of disoperculation in wasps.) *Bull. Soc. roy. sci. de Liège*, 1932, 36-40.—The author states that wasps, workers or males, placed immediately after birth or even twenty-four hours later in empty cells through the bottom, are able once more to raise the operculum (cover) of the cell, contrary to the results found by J. H. Fabre.—R. Nihard (Liège).

4978. Verlaïne, L. L'instinct et l'intelligence chez les hyménoptères. XVIII. La spécialisation et la division du travail chez les guêpes. (Instinct and intelligence in Hymenoptera. XVIII. Specialization and division of work in wasps.) *Bull. Soc. roy. sci. de Liège*, 1932, 186-191.—Wasps, like bees, accustom themselves quickly to specialized work, but there is, properly speaking, neither specialization nor division of work required in building wasps' nests. Under normal conditions all the tasks can be carried out at the customary time without the necessity of supposing a preconceived plan, the fulfilling of which would require some sort of language.—R. Nihard (Liège).

4979. Verlaïne, L. L'instinct et l'intelligence chez les hyménoptères. XIX. Les guêpes et les bourdons devant le tonneau des Danaïdes. (Instinct and intelligence in Hymenoptera. XIX. Wasps and bumblebees faced with the problem of the Danaïdes' sieve.) *Bull. Soc. roy. sci. de Liège*, 1932, 248-253.—Experiments performed by the author showed that bumblebees and wasps, as well as bees (see VII: 3302), repair cells which have been pierced before continuing to fill them with provisions.—R. Nihard (Liège).

4980. Verlaïne, L. Les frontières du psychisme et de la physiologie. (The frontiers between psychism and physiology.) *Bull. Soc. roy. sci. de Liège*, 1933, 113-116.—After a given electrical stimulus has caused autotomy of one foot in young phasmids from one to twenty-four hours old, a weaker intensity of the same stimulus is able to cause the fall of a second member. This takes place only under certain conditions, particularly if the subjects have been deprived of their nerve centers and their sensory cephalic organs. This phenomenon seems to prove that the reflex is an acquired automatism and not an innate reaction and that anticipation is an integral part of the most elementary reflex and appears to be its most primitive property.—R. Nihard (Liège).

4981. Verlaïne, L. L'instinct et l'intelligence chez les araignées. III. La construction de la toile de l'épeire diadème. (Instinct and intelligence in the spider. III. Web construction in *Epeira diadema*.) *Bull. Soc. roy. sci. de Liège*, 1933, 133-138.—According to his own experiments with young garden-spiders and contrary to the results obtained by R. W. G. Hingston, who may have used older subjects, the author finds that the spider is able to repair breaches made in a part of her web even after several mendings, and even though she may be already engaged in one of the final phases of her normal task, such as the making of the auxiliary whorl, or may be about to begin or have already begun the viscous spiral. The behavior of the garden-spider when transported to a web woven by a congeneric variety is as follows: she may leave it immediately or she may accept it. In the latter case she feels the need of remaking a part of the web, unless it is already entirely finished.—R. Nihard (Liège).

[See also abstracts 4904, 4921, 4923, 4929, 4935, 4941, 4949, 4956, 5173.]



## EVOLUTION AND HEREDITY

4982. Arnold, K. Ueber das gemeinsame Vorkommen von Taubstummheit und Schwachsinn in Sippen mit vererbter (nichtkretinischer) Taubstummheit. (On the concurrence of deaf-mutism and feeble-mindedness in stocks with hereditary non-kretinistic deaf-mutism.) Würzburg: Roll, 1933. Pp. 7.—R. R. Willoughby (Clark).

4983. Bock, W. Ueber die Vererbung der angeborenen Taubstummheit. (On the inheritance of congenital deaf-mutism.) Tilsit: Engel, 1933. Pp. 23.—R. R. Willoughby (Clark).

4984. Bracken, H. v. Mutual intimacy in twins: types of social structure in pairs of identical and fraternal twins. *Character & Personality*, 1934, 2, 293-309.—There is a higher degree of intimacy, in terms of degree of liking, rivalry, and a feeling of individual superiority, between identical twins than between fraternal twins.—M. O. Wilson (Oklahoma).

4985. Emerson, C. P. The mental hygienist's attitude toward birth control. *Ind. Bull. Char. & Correct.*, 1934, No. 216, 18-22.—The author argues that feeble-mindedness is largely a matter of social inheritance or congenital pathogenic factors, and not biological inheritance. Therefore, birth control (including sterilization) among the feeble-minded is not the whole answer to the problem of social control of the mental defective.—C. M. Louttit (Indiana).

4986. Hansen, S. New Danish legislation regarding the control of feeble-mindedness. *Eug. News*, 1934, 19, 79-80.—Legislation, soon to be enacted for the care of the habitual sex offender and the feeble-minded, is outlined. It disregards the heredity of feeble-mindedness and rests upon two practical issues. "Any feeble-minded person over 18 years of age may be sterilized when unfit for propagation because, in the terms of the law, 'he is not able duly to educate and nourish his children by his own work.' A feeble-minded person may also be sterilized when it is useful for him personally, if thereby he may afterwards be released from internment and transferred to outdoor supervisory care, or get out of state care in any form." Sterilization is authorized by vasectomy and salpingectomy only.—M. V. Louden (Pittsburgh).

4987. Kuhlmann, K. Psychologisch-anthropologische Untersuchungen an Zwillingen. (Psychological-anthropological investigations on twins.) Ilmenau i. Thür.: Reiter, 1933. Pp. 73.—These are the results of an investigation on 630 pairs of twins. The problem was to decide how far somatic similarities of twins correspond to their psychological similarities. The twins were examined in regard to monozygotism by means of H. W. Siemen's method of dermatological diagnosis and in regard to somatic characters by means of "similarity diagnosis" devised by the author. Also psychological tests were given. The present work contains a part of the results. These are: (1) To a high somatic similarity corresponds sometimes a high, sometimes only a slight degree of psychological similarity. (2) The correlation between the degree of somatic and psychological similarity is

higher in monozygotic than in dizygotic twins. (3) In twins of the same sex a higher degree of somatic similarity corresponds to a higher degree of psychological similarity.—K. Kuhlmann (Arnsgerentz bei Saalfeld).

4988. Maguino, C. Ibridismo e purezza. (Hybridism and purity.) Rome: An. Romana Edit., 1933. Pp. 35. L. 5.—The author presents biological, psychological, eugenical, and political considerations bearing on the problem of the purity of races. He states that the most hybrid peoples are those who form the most compact nations. The concept of the national state as it appeared after the French Revolution is contradictory to the concept of the racial state. The state may favor, for eugenic reasons, internal migrations in order to obtain a hybridization which may rejuvenate declining stocks and perpetuate some of their latent characteristics. The state may also favor the fusion of races.—R. Calabresi (Rome).

4989. Oppler, W. Erbbiologische Nachkommenuntersuchungen bei einem Fall von Huntingtonscher Chorea mit schizophren gefärbter Psychose. (Heredobiologic study of the descendants in a case of Huntington's chorea with a psychosis colored by schizophrenia.) *Zsch. f. d. ges. Neur.*, 1933, 144, 770-783.—R. R. Willoughby (Clark).

4990. Osborn, F. Heredity and environment. *Eug. News*, 1934, 19, 71-75.—A summary of the problems, the methods of attack, and the present state of knowledge with respect to the role of heredity and environment in the ordinary differences in intelligence between individuals and between groups. The author laments the lack of equally critical studies in the field of physical characteristics.—M. V. Louden (Pittsburgh).

4991. Pintner, R., & Forlano, G. The birth month of eminent men. *J. Appl. Psychol.*, 1934, 18, 178-188.—No reliable differences are found between months or seasons in a comparison of frequency of eminent men whose birth occurred during these periods.—R. S. Schultz (Psychological Corporation).

4992. Popenoe, P., & Johnson, R. H. Applied eugenics. New York: Macmillan, 1933. Pp. ix + 429. \$2.60.—A revision of the first edition (1918) intended for use as a college textbook. New material is added without any significant change in philosophy. Eugenic progress has been great in these fifteen years. It could be accelerated by such measures as educating the public to publicity for school marks, intelligence quotients, physical ratings, and so forth. The most menacing feature of modern civilization is the differential inter-class birth-rate. At the present time, of all the gene combinations that produce conspicuous ability, competence and leadership in the United States, approximately one-half are being permanently eliminated from evolution in each generation. The direct cost to the United States of deficient persons is five billions annually; the indirect cost twenty billions. Vocational guidance and training are of service to eugenics. The church appears to be the agency best adapted to the general teaching of

eugenic ethics. The continual draining of selected groups from country to city, and their sterilization in the city, is one of the prime factors of racial decay.—*M. P. Montgomery* (Faribault, Minn.)

4993. **Snyder, L. H.** *Modern analysis of human pedigrees.* *Eug. News*, 1934, 19, 61-69.—An outline summary of certain procedures, developed by various authors including the writer, "which are capable of proving, or at least indicating the probable validity of, any adequate hypothesis of inheritance of a human character. The methods center around the analysis of gene frequencies, linkage probabilities, and similar statistical concepts." A bibliography of eight items is appended.—*M. V. Loudon* (Pittsburgh).

[See also abstracts 5039, 5067, 5069.]

#### SPECIAL MENTAL CONDITIONS

4994. **Benedek, T.** *Mental processes in thyrotoxic states.* *Psychoanal. Quar.*, 1934, 3, 153-172.—Study of two cases of hyperthyroid psychosis discloses an organically determined anxiety manifested by destructive tendencies with anxiety and aggression appearing concomitantly. Heterosexual libido appeared to increase antagonistically to aggressive tendencies, and an increased severity of the super-ego appeared to be elaborated from the anxiety and aggression generated by the thyrotoxicosis, resulting clinically in a depressive state. The course of the psychic manifestations was observed to be similar to the course of the symptoms in comparable neurotic states. Thus a knowledge of the underlying organic processes leads to a better understanding of analytic material.—*M. H. Erickson* (Eloise Hospital and Infirmary).

4995. **Blacher, C.** *Apportstudien.* (Studies of apport.) *Zsch. f. Parapsychol.*, 1932, 425-440; 473-486; 521-535; 1933, 250-263; 337-349; 368-398.—The author does not rigidly adhere either to the spiritistic or to the animistic theory, but considers this decision as a question of method. He shows his interest in the medial psyche and tries to obtain an exact control of the parapsychological phenomena. The article is concerned here with a transport made through a gauze sack and an apport from the bare chest.—*J. Deussen* (Markkleeberg).

4996. **Bruck, C.** *Hellsehen in die Zukunft? Zufall? Oder: Keins von beiden?* (Clairvoyance? Chance? Or neither?) *Zsch. f. Parapsychol.*, 1934, 9, 211-214.—The writer discusses the reciprocal prediction of violent death between E. J. Hanussen and Causeret, the prefect of Marseilles, in the Club de Faubourg, Paris, October 29, 1932.—*J. Deussen* (Markkleeberg).

4997. **Brückner, G. H.** *Ein Beitrag zur Psychologie der Hellseher.* (A contribution to the psychology of the clairvoyant.) *Zsch. f. angew. Psychol.*, 1934, 46, 210-228.—The strong interest at the present time in occult phenomena is disquieting to a scientist. As a gesture of warning and caution the author reports in detail the unsuccessful attempt of a medium to locate a lost bracelet. The medium insisted that in

a trance he had seen the theft of the object, which was later found at a place where the owner had stepped out of an auto. The author characterizes the clairvoyant medium as a personality with a tendency toward strongly developed eidetic imagery. The medium is honest in reporting his eidetic images, but he misinterprets their significance.—*K. F. Muenzinger* (Colorado).

4998. **Buntin, A., & Burton, H. B.** *The effect of the habitual use of nicotine upon the basal metabolic rate of college women.* *Proc. Okla. Acad. Sci.*, 1934, 14, 57.—Data on 30 college women, half habitual smokers and half non-smokers, indicate that smoking has no permanent effect upon the basal metabolic rate. Abstract.—*M. O. Wilson* (Oklahoma).

4999. **Coster, G.** *Yoga and western psychology.* New York and London: Oxford Univ. Press, 1934. Pp. 249. \$2.00.—Although the inconsistencies and conflicts of mental life have been treated with some success by psychoanalysis, this involves persistent and patient effort not only by the patient but also by the analyst. It is much the same with yoga, a method of meditation, although the candidate is more independent. Of the various forms of yoga, Coster chooses that of Patanjali, dating from 200 B.C., and gives the sutras or rules for producing the form of consciousness necessary for mental reconstruction. She also gives much care to their elucidation and a comparison between them and similar steps in psychoanalysis. Although it has decided moral implications, yoga is not essentially a religious exercise, but rather a method of mental technique. Patanjali, however, emphasizes resignation to God. Yoga goes farther than psychoanalysis in that it aims not merely at mental consistency and a feeling of security, but also at creative thinking. It seems to have much to offer not only to western psychology but to western ethics as well. To be effective it will need to be presented as a simplified and practicable regimen.—*J. P. Hylan* (Stoneham, Mass.).

5000. **De Sanctis, S.** *The psychophysiology of the dream.* *Character & Personality*, 1934, 2, 269-287.—The dream should be included in the study of character and personality, since it is a component of the psychic constitution. It is valuable to the alert psychiatrist because it is revelatory and symptomatic in the psychoneuroses. The study of dreams should depend upon the experimental method, where the sleeping subject is aroused under certain controlled conditions and directed by the experimenter to detail his dream. This has the advantage of bringing about more details and involving less of the tendency logically to reconstruct and fill in the content of the dream than prevails when the report is given after normal waking.—*M. O. Wilson* (Oklahoma).

5001. **Dodds, E. R.** *Why I do not believe in survival.* *Proc. Soc. Psych. Res.*, 1934, 42, 147-172.—A criticism of the metaphysical, moral, and parapsychological arguments for survival. Recognition is made of the facts of telepathy and clairvoyance, and of the supernormality of certain subjective phenomena of mediumship. But these are asserted to

be fully as explainable by telepathy as by surviving personalities or spirits. Two arguments are offered against the survival theory: (1) the fact of its peculiar history, spirit communication not having been claimed until 1850; and (2) the biological fact of rise and decline of mind with the growth and decline of the body.—*J. B. Rhine* (Duke).

5002. Engelhardt, L. *Der Frauenmörder von Whitechapel "durch einen Hellseher entlarvt."* (The Whitechapel murderer of women "unmasked by a clairvoyant.") *Arch. f. Krim.*, 1934, 94, 202-205.—A translation of parts of the *Matin* articles referred to in Heindl's article, showing that they contradict a contemporary source of information. This is Sir Robert Anderson, who in *The Lighter Side of My Official Life* (1910) stated that the murderer was one of a gang of low-class Polish Jews.—*M. E. Morse* (Baltimore).

5003. Ettig, F. *Die Psychometrie und das Od.* (Psychometry and the od.) *Zsch. f. Parapsychol.*, 1934, 9, 118 ff.—This is a report on the statement of Baron von Reichenbach regarding the proof that all organic and inorganic bodies emit rays which are visible and perceptible to sensitive persons.—*J. Deussen* (Markkleeberg).

5004. Fellmann, F. M. *Xenoglossie oder Phantasie?* (Xenoglossia or fantasy?) *Zsch. f. Parapsychol.*, 1934, 9, 153-157.—This report concerns speaking in foreign tongues (in this case in the old Bolivian language), as was also shown in the case of Therese Neumann (Aramaic) and H. M. Melzer (Chinese).—*J. Deussen* (Markkleeberg).

5005. Fenichel, O. *Outline of clinical psychoanalysis.* *Psychoanal. Quar.*, 1934, 3, 223-302.—(Last installment—Chapter 10.) Character disorders: Neurotic cases usually show symptoms of various neuroses, with their disorder including both an inadequate control of the psyche by the ego and an involvement of the ego in the morbid process. Such ego involvement constitutes a disorder of character; character is defined as the habitual mode of bringing into harmony the inner and the outer world, and hence character behavior determines the mechanism employed in making adjustments. Thus character tends to be more static and less dynamic than psychic manifestations. Relationships between character traits, instinctual drives, and mechanisms of adjustment are elaborated, with case citations illustrating dependencies between character traits and neurotic symptomatology. Character anomalies group themselves about (1) pregenital traits, (2) reaction formations, and (3) identification and sublimation abnormalities. Discussion of these in their various significances follow, succeeded by a brief discussion of the influence of character upon analytic procedure and therapy.—*M. H. Erickson* (Eloise Hospital and Infirmary).

5006. Ferenczi, S. *Thalassa: a theory of genitality.* *Psychoanal. Quar.*, 1934, 3, 200-222.—(Last installment—Chapters 9 and 10.) Sleep is an autoplasmic, coitus an alloplastic phenomenon, the former employing projection, the latter introjection. Physiological

and psychological parallelisms are drawn between the two conditions. Both exclude and reduce sensitivity to stimuli, decrease interest in other things, and imitate intrauterine existence. The mental state of sleep and the sexual orgasm are similar. The principal difference is that sleep represents the happiness of uterine existence, while coitus includes in addition the struggles consequent thereon. The final chapter is devoted to the bioanalytic conclusions to be drawn from the whole study; particularly that each organ possesses an individuality parallel to the psychic individuality; that there is a physiology of pleasure; that the concept of organic repression is justified; that the tendency of all organic life is to regress to an earlier form; and that all organic and inorganic life represents a constant struggle between the will to live and the will to die.—*M. H. Erickson* (Eloise Hospital and Infirmary).

5007. Fischer, O. *Zur Frage der Kriminaltelepathie.* (The problem of criminal telepathy.) *Zsch. f. Parapsychol.*, 1934, 9, 193-201.—The investigator Scherman made graphological and psychometrical experiments on the sensitive Otto Reimann. On the basis of his results he examines further the possibility of using metapsychical faculties in questions of criminality.—*J. Deussen* (Markkleeberg).

5008. Freud, S. *Vorlesungen zur Einführung in die Psychoanalyse.* (Introductory lectures in psychoanalysis.) Vienna: Int. Psychoanal. Verl., 1933. Pp. 254. RM. 7.00.—See VIII: 1085.—*R. R. Wiloughby* (Clark).

5009. Hänig, H. *Ist der Spiritismus eine Wissenschaft?* (Is spiritism a science?) *Zsch. f. Parapsychol.*, 1934, 9, 214-218.—The spiritistic thesis is considered not proved, and is therefore rejected. (Polemical against J. Quade).—*J. Deussen* (Markkleeberg).

5010. Heindl, R. *Hellseher als Helfer der Kriminalpolizei.* (Clairvoyants as assistants of the criminal police.) *Arch. f. Krim.*, 1934, 94, 198-202.—Heindl reviews the controversy over the identity of Jack the Ripper and the story that the police were guided to the murderer (an insane physician) by a clairvoyant. Occultists, spiritualists and "parapsychologists" have used this tale as propaganda, and recently the Paris *Matin* sent a correspondent to interview the clairvoyant's daughter, who confirmed and elaborated the account. Heindl then wrote to the London chief of police, who denied the reports in the *Matin*. Heindl's purpose in discussing the matter is to show how the public may be deluded by reputable newspapers. The fault lies with the police.—*M. E. Morse* (Baltimore).

5011. Hellwig, A. *Schadenersatzpflicht bei dem Hinzuziehen von angeblichen Hellsehern zur Aufklärung von Verbrechen.* (Award of damages for resorting to an alleged clairvoyant for the solution of a crime.) *Arch. f. Krim.*, 1934, 94, 221-227.—An official was suspected of embezzling public funds. His official associates sought the help of a clairvoyant, who pronounced him guilty. He was then retired instead of being promoted to a position for which he



was in line. He therefore sued the officials for damages on the ground of a nervous breakdown due to the clairvoyant's slander. The decision was in his favor for the reason that police officials are not authorized to make use of all kinds of measures for the solution of a crime, and particularly of one so questionable as "criminal telepathy." A person unjustly accused by a clairvoyant suffers otherwise than one who is designated as suspicious as the result of other methods because, although proved innocent, he cannot overcome the accusation in the minds of believers in clairvoyance.—*M. E. Morse* (Baltimore).

**5012. Hofmann, A. Jenseitige Wandlungen eines Verstorbenen.** (Changes of a deceased person beyond the grave.) *Zsch. f. Parapsychol.*, 1934, 9, 115 ff.—The writer reports the fearful dreams of a woman and the changes of her deceased husband, which are in their character very much of this world.—*J. Deussen* (Markkleeberg).

**5013. Hofmann, A. Ein Klopfspuk als Komödie der Irrungen.** (A knocking ghost as a comedy of errors.) *Zsch. f. Parapsychol.*, 1934, 9, 157 ff.—*J. Deussen* (Markkleeberg).

**5014. Kaindl, A. Ohne Parapsychologie keine wahre Psychologie.** (Without parapsychology no real psychology.) *Zsch. f. Parapsychol.*, 1934, 9, 165 ff.—Even at the time of the German romantic movement the knowledge of occult life was so extensive that in comparison the experiments of to-day are insignificant. To prove this the writer gives many quotations from M. Perty, W. Crookes, A. Schopenhauer, F. X. Baader, and C. G. Carus.—*J. Deussen* (Markkleeberg).

**5015. Mengel, E. Beitrag zur Erklärung parapsychologischer Phänomene aus den Grundkonzeptionen einer dialektischen Metaphysik.** (Contribution to the explanation of parapsychological phenomena from basic concepts of a dialectical metaphysics.) *Zsch. f. Parapsychol.*, 1934, 9, 170 ff.—The writer tries to give a systematic structure to parapsychology. In his ideas he approaches the philosophy of M. Heidegger.—*J. Deussen* (Markkleeberg).

**5016. Menninger, K. A. Polysurgery and polysurgic addiction.** *Psychoanal. Quar.*, 1934, 3, 173-199.—Unconscious attitudes of the surgical patient toward surgery help determine clinical end results upon the personality. The role of organic disease or injury in binding unmanageable libido is discussed. Unconscious motives in seeking surgery are enumerated and discussed with case illustrations in the following order: (1) to avoid facing something more feared than surgery; (2) transference, depending upon the patient's need of a transference object; (3) fulfillment of infantile procreative desires; (4) castration wishes, either punitive, or erotic as masochism, etc.; (5) localized or focal self-destruction with a sacrifice of a part for the whole with a shifting of responsibility and the achievement of a wide range of activity for future capitalization.—*M. H. Erickson* (Eloise Hospital and Infirmary).

**5017. Messer, A. Professor Erich Jaensch, Marburg, über Telepathie.** (Professor Erich Jaensch,

Marburg, on telepathy.) *Zsch. f. Parapsychol.*, 1934, 9, 112-115.—Messer reports a series of articles by Jaensch which appeared in *Zsch. f. Psychol.*, 1931, 120, *Ueber den Aufbau der menschlichen Wahrnehmungswelt und die Grundlagen der menschlichen Erkenntnis*. Here Jaensch speaks of his own experiences which brought him to the conclusion that science should not oppose telepathy. Messer stresses this point.—*J. Deussen* (Markkleeberg).

**5018. Naesgaard, S. Psykoanalyse.** (Psychoanalysis.) Copenhagen: Funkis Forlag, 1933. Pp. 526.—This is a Danish lay psychoanalyst's outline of all psychoanalytic theories, with special emphasis on the Freudian school. The author illustrates the work throughout with cases from his own experience, especially on hysteria, psychasthenia or "compulsion neurosis," depression, and melancholia.—*V. Coucheron-Jarl* (Mooseheart Laboratory for Child Research).

**5019. Neumann, J. Angst und Krankheit vor dem Examen. Wesen, Ursachen und Behebung.** (Anxiety and illness before examination. Nature, cause and cure.) Gütersloh: Bertels, 1933. Pp. xii + 112. RM. 2.40.—The book has an essentially individual-psychological basis. Numerous characteristic examples, mostly of a neurotic nature, are analyzed, and characterological types of sufferers from fear of examination are established. The causes of anxiety are explained on the basis of childhood experiences, and individual-psychological methods for the cure of anxiety are discussed.—*D. Russel* (Leipzig).

**5020. Quade, F. Mediale Forschung in Hypnose.** (Mediumship investigation in hypnosis.) *Zsch. f. Parapsychol.*, 1934, 9, 202-208.—This is a report on "B. V. Johansen and his unique medium Mai Kalamies" in Reval, and her theosophic speculations and attempts at healing.—*J. Deussen* (Markkleeberg).

**5021. Rhine, J. B. Extra-sensory perception.** Boston: Boston Soc. Psych. Res., 1934. Pp. xiv + 169.—Evidence is given for the actual and demonstrable occurrence of extra-sensory perception, a cognition of events without the usual sensory or rational experience required by our habitual concepts for the knowing act. Knowledge of the phenomenon needs refinement through variation and improvement of conditions. Experiments were made in the waking and hypnotic states, under the influence of drugs, and with both pure telepathy and pure clairvoyance. Hypotheses of chance, fraud, incompetence, unconscious sensory perception, and rational inference are refuted. A discussion is given of the physical, physiological, and psychological conditions affecting extra-sensory perception, but no theory is found adequate. Important factors in extra-sensory perception are abstraction, effort, and attention. A detailed account of the subjects and their reports is given.—*M. Gifford* (Worcester State Hospital).

**5022. Roback, A. A. Pioneers of the inferiority theory.** *Character & Personality*, 1934, 2, 288-292.—Contrary to the popular opinion that A. Adler conceived the inferiority theory, the concept is found in the literary, philosophical and psychiatric works of such writers as Montaigne, Bacon, Kant, De Staël,

Goethe, Nietzsche, Koch, and James.—*M. O. Wilson* (Oklahoma).

5023. Sachs, W. *Psychoanalysis: its meaning and practical applications*. London: Cassell, 1934. Pp. x + 246. 60/.—Part I discusses, or expounds, the theory of psychoanalysis. Part II deals with applications of psychoanalysis to the study of literature. The literature analyzed is rather various and comprises Wassermann's *The World's Illusion*, *The Mauritizius Case*, and *Etzel Andergast*; Shakespeare's *Hamlet*; Mrs. Millin's *Mary Glen*, and Dostoevsky's *Crime and Punishment*, *The Brothers Karamazov* and *The Idiot*.—*F. C. Bartlett* (Cambridge, England).

5024. Schmotzer, F. *Elementarwesen im Spiegel der Sagen und Märchen*. (Spirits of the elements in the light of myths and fairy tales.) *Zsch. f. Parapsychol.*, 1934, 9, 178-183.—Spirits of earth, fire, water and air are described.—*J. Deussen* (Markkleeberg).

5025. Simsa, J. *Experimente mit dem Prager physikalischen Medium Wolf*. (Experiments with a physical medium, Wolf, from Prague.) *Zsch. f. Parapsychol.*, 1934, 9, 102-112.—The author tries to explain the essence of "phantoms." The phantom is a physical medium-phenomenon, i.e., a realized psychic act like other apports. The phantom is a part of the soul of the medium.—*J. Deussen* (Markkleeberg).

5026. Spiller, G. *A contribution towards a science of dreams*. London: Farleigh Press, 1934. Pp. 16.—The author discusses dream content and the states of waking and dreaming, basing his findings on his own experiences. He believes dreams of the fast-asleep and falling-asleep periods are mostly forgotten and that they are forgotten because of confusedness, inanity, absurdity, irrelevance, or objectionableness. Dreams are practically never remembered in full and virtually never re-enter dream life. They are characterized by exaggeration and extravagances and are governed mostly by momentary fears, hopes, reasonings, and desires; they refer to the present only and always include the dreamer's self, the dream personality being identical with the waking personality. Causes of dreams are listed; the principal reason is believed to be a certain degree of wakefulness, occasioned by strong sensory stimuli or light sleep. Dream consciousness seems to require and to supply a limitlessly plastic material, probably sensory in kind; it operates at a much lower level of effort than the waking consciousness, and so is free to adopt any solution demanded, however incompatible with waking experience and logic. The author suggests the use of his paper as a draft for a prolific dreamer and good recollector of dreams to lay the foundations of the science, and gives methodological aspects to be borne in mind.—*M. Gifford* (Worcester State Hospital).

5027. Tuinstra, C. L. *Het symbol in de psychoanalyse*. (The symbol in psychoanalysis.) Amsterdam: H. J. Paris, 1933. Pp. 231. 3.50 f.—*R. R. Willoughby* (Clark).

5028. Vogl, C. *Die parapsychischen Phänomene in Prag-Branik*. (Parapsychological phenomena in Prague-Branik.) *Zsch. f. Parapsychol.*, 1934, 9, 145-153.—The writer reports that, as the apports of the medium Wolf occurred in nearly complete darkness and without precise control, they are without scientific evidence. But with the clear light of a lamp and under nearly incontestable conditions telekinesis was shown, i.e., movement of objects by unknown forces.—*J. Deussen* (Markkleeberg).

5029. Walther, G. *Neue Versuche mit dem norwegischen Medium "Frau Ingeborg"*. (New experiments with the Norwegian medium "Frau Ingeborg.") *Zsch. f. Parapsychol.*, 1934, 9, 97-102.—This is an abstract of a book by L. Dahl of South Norway, *Død! Hvorfor din Brodd?*, which deals with the parapsychological faculties of his daughter. The medium was able to read the contents of closed letters; she expresses her astonishment that the Christian confessions deny the occult sciences, instead of using their truth for religious purposes, to overcome fear of death, and to confirm the belief in the next world.—*J. Deussen* (Markkleeberg).

5030. Winterstein, A. *Contributions to the problem of humor*. *Psychoanal. Quar.*, 1934, 3, 303-316.—Humor as a psychological process is discussed in relation to the teachings of Freud and others, followed by the presentation of the author's views. The following points are made: Energy is withdrawn from sadistic and masochistic impulses and supplied to the super-ego. Object libido is transformed into narcissistic libido. There is defusion of instincts and freeing of aggression with intellectualization of destructive tendencies, permitting depreciatory contemplation of realities and degradation of the ego. Maternal identification permits kindly ego reassurance by the super-ego. Humor originates in the oral sucking stage and depends upon narcissistic pleasure increase. Humorists as character types are either optimistic, primarily narcissistic, and reconciled, or pessimistic, melancholic, and distracted. None are free of either depressive or hypomanic components.—*M. H. Erickson* (Eloise Hospital and Infirmary).

[See also abstracts 4971, 5043, 5060.]

#### NERVOUS AND MENTAL DISORDERS

5031. Allen, F. H. *Therapeutic work with children*. *Amer. J. Orthopsychiat.*, 1934, 4, 193-202.—This presidential address emphasizes the importance of recognizing the integrity of the patient and his capacity to assume responsibility.—*H. Peak* (Randolph-Macon).

5032. Altherr-Bachus, M. *Untersuchungen über das Problem der naiven Physik bei hochgradig Schwachsinnigen an Hand von Arbeitsproben*. (Investigations by means of work tests on the problem of naive physics in high-grade feeble-minded subjects.) Seen-Winterthur: Jäggi-Meyle, 1933. Pp. 71.—*R. R. Willoughby* (Clark).

5033. [Anon.] *I lost my memory: the case as the patient saw it*. London: Faber & Faber, 1932. Pp. 305.—*R. R. Willoughby* (Clark).

5034. [Anon.] **Gründungsversammlung der Ueberstaatlichen Allgemeinen Aerztlichen Gesellschaft für Psychotherapie.** (Meeting to found the International General Medical Society for Psychotherapy.) *Zentbl. f. Psychotherap.*, 1934, 7, 134-138.—This meeting was called by Jung in connection with the Seventh Psychotherapeutic Congress. He was elected president. The delegates, representing their national groups, are: Cimbal and M. H. Goering, Germany; v. d. Hoop, Holland; Bjerre, Sweden; and Brüel, Denmark. The Society is established in accordance with the Swiss legal code, and its present headquarters are at Kilsnacht bei Zürich. It is neutral in politics and religion. Membership is limited to approved physicians and medical societies. The constitution is given in full.—*M. E. Morse* (Baltimore).

5035. **Bennett, E. A.** The psychopathology of sexual perversion. *Proc. Roy. Soc. Med.*, 1933, 26, 1030ff.—*R. R. Willoughby* (Clark).

5036. **Berry, R. J. A.** Some modern views of the human mind and its disorders. *Eug. Rev.*, 1934, 26, 127-132.—This digest of an illustrated lecture given before the Eugenic Society is a simple and summary presentation of the evolution and growth of the nervous system, together with a suggestion for the application of such knowledge to intelligent observation of mental abnormalities and aberrations.—*M. V. Loudon* (Pittsburgh).

5037. **Besuch, G.** Ueber die psychischen Folgen von Kopfverletzungen bei Kindern. (The mental sequelae of head injuries in children.) Düsseldorf: Nolte, 1933. Pp. 12.—*R. R. Willoughby* (Clark).

5038. **Boltz, O. H.** Trend situations in manic-depressive psychoses and their interpretation. *Psychiat. Quar.*, 1934, 8, 111-120.—The author cites eight cases and gives the following conclusions: "(1) Prolonged renunciation or frustration of Eros may in some individuals lead to attacks of depression, mania, or mixed manic-depressive reactions. (2) Strangulation of Eros automatically releases death or destruction impulses. (3) Depression represents a tendency to negate life; it is a 'living-death' or may actually lead to death itself. (4) The manic reaction in the manic-depressive psychosis represents an 'as if,' forced, artificial affirmation of life behind which lurks a strong death or destruction impulse. (5) In depression the death or destruction impulse is usually inhibited in its satisfaction upon an external object and becomes transformed into an impulse toward self-destruction."—*C. R. Atwell* (Boston Psychopathic Hospital).

5039. **Bonhoeffer, K.** [Ed.] Die psychiatrischen Aufgaben bei der Ausführung des Gesetzes zur Verhütung erbkranken Nachwuchses. (The psychiatric tasks in the carrying out of the law for the prevention of hereditary disease.) Berlin: Karger, 1934. Pp. 98. RM. 3.00.—*R. R. Willoughby* (Clark).

5040. **Braatøy, T.** Sinnssykdom og emigrasjon II. Nogen tilleggsbemerkninger om psykiatri og sociologi. (Insanity and emigration. Some additional remarks on psychiatry and sociology.) *Tidsskr. f. d. norske*

*laegefor.*, 1934, 54, 680-690.—The writer continues the discussion of the work of Ö. Ödegaard, questioning in the light of sociology and clinical psychology the conventional psychiatric approach to schizophrenia. (See VIII: 3585, 3625.)—*V. Coucheron-Jarl* (Mooseheart Laboratory for Child Research).

5041. **Braatøy, T.** Sinnssykdom og emigrasjon II. Nogen tilleggsbemerkninger om psykiatri og sociologi. (Insanity and emigration. Some additional remarks on psychiatry and sociology.) *Tidsskr. f. d. norske laegefor.*, 1934, 54, 729-737.—This is the writer's third article in the discussion with Ödegaard, dealing with sociological aspects of insanity, with special reference to schizophrenia, and the emigrant situation. (See VIII: 3585, 3625, and 5040.)—*V. Coucheron-Jarl* (Mooseheart Laboratory for Child Research).

5042. **Brousseau, A.** Variations des classifications psychiatriques au Canada Français 1924-32. (Variations of psychiatric classifications in French Canada, 1924-32.) *Ann. méd.-psychol.*, 1934, 92, 777-782.—The province of Quebec, under some pressure, officially adopted the psychiatric classification of the American Psychiatric Association in 1932. They were already used by the rest of Canada and the United States. The classification in use in Quebec in 1924 and the proposed subdivisions of the author are given. The category of "psychosis with psychopathic personality" in the new classification adopted from America is criticized especially. The author points out that "confusions mentales" (in the former classification) are very common among the French-Canadian population.—*M. B. Mitchell* (New Hampshire State Hospital).

5043. **Brown, W.** Psychology and psychotherapy. (3rd ed.) Baltimore: Wood, 1934. Pp. vii + 252. \$4.75.—A collection of essays on hypnosis, war neuroses, theories of emotion, psychoanalysis, dissociation, dream theory, alcoholism, suggestion, adolescence, war prevention, social interaction, the mind-body problem, occultism, and the two-factor theory.—*R. R. Willoughby* (Clark).

5044. **Burling, T.** Life experience as therapeusis. *Amer. J. Orthopsychiat.*, 1934, 4, 283-289.—Regarding schizophrenia essentially as a failure of the individual to reach maturity in the field of inter-personal relationships, the author feels that in some cases experience itself may bring maturity after the psychiatrist has helped modify the outstanding personality difficulty which has prevented the patient from assimilating experience.—*H. Peak* (Randolph-Macon).

5045. **Cohen, I. J.** Experimentalpsychologische Untersuchung eines Falles von Paraphasie und Dyslexie. (Experimental-psychological investigation of a case of paraphasia and dyslexia.) Düsseldorf: Nolte, 1932. Pp. 14.—*R. R. Willoughby* (Clark).

5046. **Cremone, G.** Ipocondriaci persecutori di medici. (Hypochondriacs who are persecutors of physicians.) *Arch. di antrop. crim. psychiat. e med. leg.*, 1934, 54, 16-30.—The author describes a few clinical cases observed in the insane asylum of Reggio Emilia, pointing out the morbid syndrome, which



consists essentially of a hypochondriac-persecutory delusion. He calls attention to the great difficulty in curing and controlling such patients and to their danger even to physicians. His own observations lead him to agree with another author that persecutory hypochondria belongs to the group of paranoid psychoses.—*R. E. Schwartz* (V. A. Facility, Northampton, Mass.)

5047. Desruelles, —, Léculier, P., & Gardien, M. P. Contribution à l'histoire des classifications psychiatriques. (A contribution to the history of psychiatric classifications.) *Ann. méd.-psychol.*, 1934, 92, 637-675.—The various psychiatric classifications published in the *Ann. méd.-psychol.* since its beginning 90 years ago are reviewed. In 1861 and again in 1888 the journal published the proceedings of the Société Médico-Psychologique, which discussed and argued over classifications for months at a time. Various classifications have depended upon symptomatology, etiology, pathological anatomy, and mixtures of these. The most recent classifications are mixed and were crystallized by Kraepelin.—*M. B. Mitchell* (New Hampshire State Hospital).

5048. Doering, C. R., & Raymond, A. F. Reliability of observation in psychiatric and related characteristics. *Amer. J. Orthopsychiat.*, 1934, 4, 249-257.—Results of two separate observations of the same 29 case histories of patients at the Boston Psychopathic Hospital show marked disagreement on the classification of personality traits, somatic illness as an etiological factor, and previous attacks as related to present mental condition, when made by the same individual. Similar disagreement was found between pairs of observers rating specific items in the histories.—*H. Peak* (Randolph-Macon).

5049. Dumas, G. Mentalité paranoïde et mentalité primitive. (Paranoid mentality and primitive mentality.) *Ann. méd.-psychol.*, 1934, 92, 754-762.—The author considers one important difference between paranoïacs and primitive man, viz., the former have an individualistic mentality and the latter a social mentality.—*M. B. Mitchell* (New Hampshire State Hospital).

5050. Evensen, H. Om innleggelse i asyl efter egen begjaering og uten sinnssykeattest. II. (On admission to institutions for the mentally diseased on the request of the patient and without proper documentation of insanity. II.) *Tidsskr. f. d. norske lægefor.*, 1934, 54, 695-708.—A survey of psychiatric legislation in France, Holland, Belgium, England, and Germany.—*V. Coucheron-Jarl* (Mooseheart Laboratory for Child Research).

5051. Evensen, H. Om innleggelse i asyl efter egen begjaering og uten sinnssykeattest. (Admission to institutions for the mentally diseased on request and without official attestation for insanity.) *Tidsskr. f. d. norske lægefor.*, 1934, 54, 754-767.—A survey of psychiatric legislation in Switzerland, Italy, Spain, Sweden, Denmark, and Finland. (See VIII: 5050.)—*V. Coucheron-Jarl* (Mooseheart Laboratory for Child Research).

5052. Fauville, A. La psychologie des débiles mentaux. (The psychology of feeble-mindedness.) *Rev. belge de péd.*, 1934, 15, 393-398; 451-454; 518-521.—The author describes the physical and psychological characteristics of feeble-mindedness, its causes, frequency of distribution, methods of diagnosis, and the education of the feeble-minded.—*R. Nihard* (Liège).

5053. Fauville, A. Etude de deux écoliers débiles mentaux. (A study of two feeble-minded school-boys.) *Rev. belge de péd.*, 1934, 15, 598-601.—The author gives an analysis of the results from the psychological examinations of two boys of the same age (11.7 and 11.8) who gave nearly the same mental age and the same IQ (60 and 63) for the Binet-Simon scale, but who gave very different results for the Pintner-Paterson scale and the Goodenough design test.—*R. Nihard* (Liège).

5054. Fessmann, H. Untersuchungen über das Bildverständnis schwachsinniger Kinder im Alter von 6-14 Jahren. (Investigations on the comprehension of pictures of feeble-minded children 6-14 years of age.) Birkenbeck b./Freising Obb.: St. Georgsheim, 1933. Pp. 214.—*R. R. Willoughby* (Clark).

5055. Fricke, P. Psychologie des Alters. Christliche und psychologische Seelenführung. (The psychology of old age. Christian and psychological mental guidance.) *Arzt u. Seelsorger*, 1934, No. 27. Pp. 23.—*R. R. Willoughby* (Clark).

5056. Gutheil, E. Psychotherapie des praktischen Arztes. (Psychotherapy for the practicing physician.) Vienna: Inst. f. aktive Psychoanalyse, 1934. Pp. 272. RM. 18.—Expressed in non-technical language, this book seeks to make available for physicians the fundamental facts of psychotherapy. The mechanism of various diseases is illustrated by numerous examples taken from actual practice. The book may be thought of as a simplified version of psychoanalysis; it is a "diminutive analysis."—*E. Gutheil* (Vienna).

5057. Hadfield, J. A. Some aspects of the psychopathology of sex perversion. *Proc. Roy. Soc. Med.*, 1933, 26, 1021 ff.—*R. R. Willoughby* (Clark).

5058. Heuyer, G., & Nacht, S. Un cas d'obsession guéri par la réalisation de l'idée obsédante. (A case of obsession cured by the realization of the obsessing idea.) *Ann. méd.-psychol.*, 1934, 92, 720-726.—A rather feeble-minded newspaper peddler, who could not get along well at home, read in a newspaper about a blood transfusion. Henceforth, he presented himself at one hospital after another as a voluntary donor of blood. After unsuccessful attempts to give his blood, he became hypomanic and finally had to stop work, and revealed his obsession to a physician. He considered the transfusion as a sacrifice; he wished to help other people. Although the anxiety had lasted for five years, he was immediately relieved after he gave some blood. Eight weeks later, he was still feeling in good health and able to work, and the obsession had not returned.—*M. B. Mitchell* (New Hampshire State Hospital).

5059. Hinsie, L. E., Barach, A. L., Harris, M. M., Brand, E., & McFarland, R. A. The treatment of dementia praecox by continuous oxygen administration in chambers and oxygen and carbon dioxide inhalations. *Psychiat. Quar.*, 1934, 8, 34-71.—Under various psychological tests no consistent improvement was observed in the cases which did not gain a remission. From the observations made in this study, it does not appear that oxygen and carbon dioxide treatment of catatonic dementia praecox patients is to be advocated as a general therapeutic procedure.—C. R. Atwell (Boston Psychopathic Hospital).

5060. Hirschmann-Günzel, A. Ueber die Angst und ihre Erscheinungsformen beim weiblichen Geschlecht. (Anxiety and its manifestations in women.) Hamburg Phil. Diss., 1933. Pp. 38.—R. R. Willoughby (Clark).

5061. Hoffmann, H. F. Ueber die Zwangsneurose; eine klinische Studie. (The compulsion neurosis; a clinical study.) Tübingen: Heine, 1934. Pp. 51. RM. 2.50.—This study consists of three parts: the first deals with the nature and meaning of compulsory phenomena, the second with the origin of compulsion, and the third with the clinic and therapy. After a definition of compulsion its manifold manifestations are described, their common basic affect, their senselessness and their meaning for personality as a whole, their relation to the sphere of magic (superstitious fear of an unhappy fate, magic of the "counter-compulsion"), and self-punishment as a defense against imminent dissolution. The second part deals with the patient, his position with regard to heredity, his relatives, among whom is likely to be a "compulsory neurotic character" who (without showing the gross symptoms) shows a similar characteristic, a self-tormenting sense of duty and a motive of guilt-expiation. Character and environment, experience and personality are discussed in their interrelationship, and psychoanalysis is also discussed in a critical way. As the basic disturbance the writer regards a discord in disposition, and besides affective causes there are certain general peculiarities of the organism. The third part offers a clinical picture of the course of the compulsion neurosis, its prognosis, and its relation to the personality; and finally possibilities and difficulties of the treatment, especially of psychotherapy.—H. F. Hoffmann (Giessen).

5062. Hohmann, K. Prognose der Dementia praecox. (Prognosis of dementia praecox.) Königsberg: Raabe, 1933. Pp. 15.—R. R. Willoughby (Clark).

5063. Katz, S. E. The family constellation as a predisposing factor in psychosis. *Psychiat. Quar.*, 1934, 8, 121-128.—From 194 case histories selected only on a basis of complete records, the conclusions are reached that: "(1) The size of the family does not appear to be correlated with the incidence of psychoses. (2) The order of birth of the siblings seems to bear no relation to the incidence of psychoses. (3) A preponderance of older sisters in the family is suggested as a predisposing factor in male dementia

praecox."—C. R. Atwell (Boston Psychopathic Hospital).

5064. Kleist, K. *Gehirnpathologie*. (Brain pathology.) In *Handbuch der ärztlichen Erfahrungen im Weltkriege 1914-1918*. Leipzig: Barth, 1933.—This extensive work is based on 276 cases of brain injury and on 106 focal cases. The author does not merely describe but gives also his own interpretation. This is the case not only with regard to focal symptoms of the cortex like aphasia, apraxia, agnosia, etc., but also with regard to brain-stem symptoms as he observed them in lesions and illness of the brain stem. This is true in cases of persistence of posture, tremor, choreic and athetotic motor hyperkinesia, but also for cases of more complicated changes of personality, for the amnesic symptom complex, hallucinations and alterations of the ego. For the analysis of the focal disturbances the author utilizes the results of C. and O. Vogt, Brodmann, Von Economo and others. In the cortex the author distinguishes three fields, motor, sensory and psychic, and sensory-motor and sensory-psychic mixed zones. Several excellent diagrams of the brain are also given, indicating the functions of the different parts. There is also an extensive bibliography.—E. Beck (Frankfurt, a.M.).

5065. Kollé, K. *Sexualpsychopathologie*. (Sexual psychopathology.) *Fortsch. Neur. Psychiat. u. Grenzgeb.*, 1934, 6, 223-242.—This article deals primarily with cases of castration which have been reported in psychological and medical literature. The author has tabulated each according to the following headings: the author who reported it; the psychiatric diagnosis; age at which castration took place; the age to which the case was followed; libido; potency; therapeutic results; other bodily and mental results. In the case of libido, 15 cases were so reported that a definite judgment could not be made. There were 11 cases with libido preserved and 13 with libido extinguished. The reports on potency showed 14 cases with no exact report, 12 of unchanged potency, and 13 deprived of potency. In regard to bodily changes the author could find no definite castration type. The main changes reported were the loss of beard and increase in weight. Under the heading mental changes, 10 cases showed disturbances, but these either were present before the operation or were merely aggravations of previous disturbances. In 15 cases there was no report on the physical or mental changes. Recent laws in Germany have made castration and sterilization less difficult to carry through when necessary, and many more cases are consequently provided for study. There is a bibliography.—D. S. Oberlin (Newark, Del.).

5066. Lévy-Valensi, J. *Mentalité primitive et psychopathologie*. (Primitive mentality and psychopathology.) *Ann. méd.-psychol.*, 1934, 92, 676-701.—The psychotic patient frequently has symptoms analogous to the behavior episodes of primitive man. For instance, both may use symbolism, fail to discriminate the ego from the non-ego, believe in spirits, mystical birth, resurrection, the migration of the soul during the night, the reality of dreams, double per-

sonality, have hallucinations, and create language with great symbolic value. The psychotic patient, however, is only analogous to the primitive man; they are not identical. The primitive man is like the newborn infant in having potentialities of development; he lacks only experience. The psychotic is only a caricature of primitive man. Bibliography.—*M. B. Mitchell* (New Hampshire State Hospital).

5067. Müller, M. *Casuistischer Beitrag zum Erbgang der Schizophrenie*. (Casuistic contribution to the heredity of schizophrenia.) *Arch. d. Julius-Klaus-Stiftung f. Vererbforsch.*, 1926, 2, No. 3-4.—The writer had the opportunity to observe schizophrenia in the case of three sisters of the families Farner and Setzi. The study of the paternal and maternal family starts with the description of the great-grandfather, who in the case of Farner was a pronounced psychopathic personality, labile, unsteady, hypomanic, alcoholic. In the second generation is a not quite clear case of schizophrenia, and in the third generation are two clear cases. In the Setzi family schizophrenia is found only in the second generation in three cases and in the third generation in four cases. In the Farner family we find unsteadiness, inventive mania, sensitiveness; the Setzi family shows greater steadiness and sobriety, with little intelligence and less interests, but at the same time obstinacy and irritability. The three sisters are more similar to the father, who has been temporarily confined to a mental hospital. The mother has been only a psychopathic personality. Decisive on her part is first of all the schizophrenia of her father (who was a suicide after a long stay in a mental hospital).—*W. Wirth* (Leipzig).

5068. Penrose, L. S. *The complex determinants of amentia*. *Eug. Rev.*, 1934, 26, 121-126.—The author would classify the determinants of amentia into two classes: (1) Arbitrary determining factors which are dependent upon legal and social definitions. The number designated as defective in the interpretation of these definitions varies with the outlook of local magistrates and medical officials, and with the accommodations available in local institutions. Social behavior is a criterion of defect. (2) Biological causes of mental inferiority, in which heredity and environment are probably of approximately equal importance. Accidental occurrences are more apt to reduce than to raise intelligence. These accidents may be infectious disease, injuries to the nervous system, or effects of uncommon gene mutations; and "there can either be cumulative effects or else causes which, innocuous in themselves, may combine disastrously." Therefore "we shall have to fight each individual cause by the method which is most suitable."—*M. V. Louden* (Pittsburgh).

5069. Pollock, H. M., Malzberg, B., & Fuller, R. G. *Hereditary and environmental factors in the causation of dementia praecox and manic-depressive psychoses*. *Psychiat. Quar.*, 1934, 8, 77-97.—The family stock of patients with manic-depressive psychoses has a greater expectation of mental disease than is found in the general population. It appears

that the sex element enters into the transmission of manic-depressive psychoses, though the precise manner of this transmission or sex linking is not yet understood.—*C. R. Atwell* (Boston Psychopathic Hospital).

5070. Porot, A. *Late periodical psychoses*. *General Practice*, April-June, 1933.—*R. R. Willoughby* (Clark).

5071. Rehder, H. *Hysterie; Versuch einer Einführung in die Wandlungsgesetze der Hysterie*. (Hysteria. An attempt at understanding the dynamic laws of hysteria.) Altona-Hamburg: Bede-Verl., 1933. Pp. 120. Mk. 4.—According to the author the hysteric disturbances of functions are acquired affective reflexes. It is the affect of fear which first establishes these reflex paths. When the fright arises, the voluntary actions which the person is doing at that time become a part of the affective reflex of fright. The stasis of painful feeling which is characteristic for the fright, generates a need of discharge through the newly established reflex paths. This need distinguishes hysteria from other psychogenic reactions. The individual observes the existence of such reflexes and uses them voluntarily if needed. Through repetition these reflex paths become strong and are later aroused even without the will of the patient by external stimuli. Profound changes of personality and character follow. The author regards hysteria as a reversible process. In the therapy psychoanalytic methods are avoided and only the removal of fear is attempted. By removing the fear the connection between affect reflexes and actual functions which is characteristic of hysteria is solved.—*H. Rehder* (Altona-Elbe).

5072. Rümke, H. C. *Ontwikkelingspsychologie en psychotherapie*. (Developmental psychology and psychotherapy.) Amsterdam: H. J. Paris, 1933. Pp. 30. 0.75 f.—*R. R. Willoughby* (Clark).

5073. Schneider, K. *Die psychopathischen Persönlichkeiten*. (The psychopathic personalities.) (3rd ed.) Leipzig, Vienna: Deuticke, 1934. Pp. viii + 123. RM. 5.—The general part deals with concepts of normal, abnormal and psychopathic personality, the physical basis of the psychopathic personalities, and the different attempts of their division. The special part deals with the hyperthymic, depressive, insecure, fanatic, emotionally unstable, explosive, unemotional, weak-willed and asthenic types of psychopaths. The third edition has new paragraphs on the concept of illness and the genealogy of the psychopathic personality, and an enlargement of the chapter on the distinction between psychopathic personality and psychosis. In the special part is a completion of the description of compulsory states, epileptoid psychopaths, psychopathology of drives, and the problem of neurasthenia. The list of the important literature has been brought up to date.—*K. Schneider* (Munich).

5074. Schneider, K. *Die Neurasthenie- und Hysteriefrage, Somatopathie und Psychopathie*. (The problems of neurasthenia and hysteria: somatopathy



and psychopathy.) *Dtsch. med. Woch.*, 1933, H. 33, 1275-1279.—*M. E. Morse* (Baltimore).

5075. Šebek, J. **Sensitivní změny v encefalitickém syndromu parkinsonském.** (Modifications of sensitivity in the Parkinsonian encephalitic syndrome.) *Rev. v neur. a psychiat.*, 1933, 30, 209-216.—The author investigated the sensitivity of 400 subjects affected by the Parkinsonian encephalitic syndrome. 58% of the cases reported subjective ailments of sensitivity consisting in pains and paresthesias. Less frequent objective troubles occurred in 5% of the cases. These sense ailments are of an organic nature, arising from lesions of the centripetal optic connections leading to the subthalamic region and the striate area.—*S. H. Newman* (Clark).

5076. Skälweit, W. **Schizophrenie.** (Schizophrenia.) *Fortsch. Neur. Psychiat. u. Grenzgeb.*, 1934, 6, 261-269.—This is a short article dealing with the writings of a large number of investigators. The first section deals with tuberculosis and schizophrenia from the point of view of etiology. The second section is concerned with pathogenesis, the third internal secretions and circulation, and the last with bodily fluidity.—*D. S. Oberlin* (Newark, Del.)

5077. Skälweit, W. **Schizophrenie.** (Schizophrenia.) *Fortsch. Neur. Psychiat. u. Grenzgeb.*, 1934, 6, 271-299.—This second and concluding article discusses first of all the work of various investigators who were concerned with schizophrenia from a somatic and neurological point of view. The second part of the article is devoted to material concerning histological investigation. The third section takes up experimental catatonia, i.e. catatonia induced in animals by means of drugs. In other sections, catatonia as a syndrome in human beings, exogenetic and symptomatic schizophrenia, clinical problems, clinical peculiarities, the problem of delusion, psychology, and therapy in relation to schizophrenia are discussed. There is a bibliography of more than 200 titles.—*D. S. Oberlin* (Newark, Del.)

5078. Smalldon, J. L. **Pre-psychotic personality of manic-depressive patients.** *Psychiat. Quar.*, 1934, 8, 129-147.—The cyclothymic individual is prone to present the following characteristics: Females are prone to predominate by a ratio of 2 to 1. Physical habitus is apt to be pyknic or pyknoid, and the personality type is most frequently extraversion. This type of personality is ordinarily of good intellectual standard, inclined to be voluble, hyperactive, and interested in the environment. There is a marked tendency to episodes of over-activity or inactivity. The cyclothymic is a sociable person, with a wide range of interests, trustful, generous, kind-hearted but stubborn, sensitive and easily offended. He is also frank and open, honest and truthful, self-reliant and of the leader type, is inclined to be affectionate, demonstrative, somewhat egotistical, vain and proud. There is usually some degree of familial attachment. The cycloid individual is matter-of-fact and inclined to think in a logical and orderly manner, is usually cheerful and optimistic but may be irritable, sensitive and fault-finding. His sexual adjustment is appar-

ently a rather superficial affair. There is a tendency to a feeling of superiority. In the manic and circular types the ratio of pyknic or pyknoid habitus to asthenic habitus was roughly two to one, while in the depressed form the groups were almost equal. These groups were more definitely extraverted than was the depressed group.—*C. R. Atwell* (Boston Psychopathic Hospital).

5079. Tropeano, G. **La medicina sociale.** (Social medicine.) Naples: Alberto Morano, 1933. Pp. 203. 12 L.—*R. Calabresi* (Rome).

5080. Wallin, J. E. W. **State provision for mentally handicapped children in the United States. II.** *Tr. School Bull.*, 1934, 31, 51-57.—Five states (Mass., N. J., N. Y., Pa., Conn.) universally and a few others when population warrants it require classes to be established for mentally handicapped children. Because improperly trained mentally handicapped children become dependents and frequently also delinquents, the tendency to create special classes deserves encouragement. Enrolment of 16 in a class is satisfactory, 18 to 20 when classes are sharply graded; and 22 in classes for the backward, 25 to 30 when classes are sharply graded. A summary of state provisions for financing is included.—*E. M. Achilles* (Columbia).

5081. Wiersma, E. D. **Capita psychopathologica.** (Chapters in psychopathology.) Amsterdam: Noordhoff, 1933. Pp. 695. 13.50 f.—*R. R. Willoughby* (Clark).

5082. Williams, E. H. **The doctor in court.** Baltimore: Williams & Wilkins, 1934. Pp. 305. \$3.00.—*R. R. Willoughby* (Clark).

5083. Williams, F. E. **Russia, youth, and the present-day world.** New York: Farrar & Rinehart, 1934. Pp. xxii + 270. \$2.50.—A collection of essays, previously published or delivered as lectures, upholding the general thesis that the most important limiting factor in mental hygiene (broadly considered) is the conflict-forcing structure of west European social philosophy, and that the results of the Russian experiment indicate success in modifying this.—*R. R. Willoughby* (Clark).

[See also abstracts 4826, 4856, 4985, 4986, 4989, 5019, 5108, 5167, 5225, 5294, 5313.]

#### PERSONALITY AND CHARACTER

5084. Baumgarten, F. **Die Charaktereigenschaften.** (Character traits.) *Beitr. z. Char.- u. Persön.*, 1933, No. 1. Pp. 81.—The writer starts this study about the nature of character with some considerations of character traits, in order to achieve an understanding of character as a whole on the basis of an analysis of its partial functions. She tries to show that the concept of character traits was formed on the basis of the behavior of men as it is observed in daily experience. On the ground of such genetic considerations the writer comes to a definition of character traits and character as a whole. It is shown further that the close connection between character and types of behavior leads to an identification of character and

behavior. The same behavior can be the expression of quite different character traits and the same character trait can produce quite different forms of behavior. In the chapter on "genuine and spurious traits" some sources of error in judging human character are indicated. The analysis of the character traits leads to the statement of seven laws which should aid in a more adequate interpretation of human behavior. An inventory of character traits (with 1629 terms) is also given which is the first inventory of this kind.—*F. Baumgarten* (Solothurn-Rosegg).

5085. Beck, S. J. **The Rorschach method and personality organization.** *Amer. J. Orthopsychiat.*, 1934, 4, 290.—The conclusion of the author's discussion of personality as the product of five forces: form perception, organizing energy, creativity, affectivity, and environment.—*H. Peak* (Randolph-Macon).

5086. Bobertag, O. **Bemerkungen zum Verifikationsproblem.** (Remarks about the problem of verification.) *Zsch. f. angew. Psychol.*, 1934, 46, 246-249.—The author discusses an experiment by Krüger and Zietz (see VIII: 2153) in which the doubtful validity of character self-analysis was demonstrated. He thinks that such an analysis is a special case of common pseudo-knowledge.—*K. F. Muenzinger* (Colorado).

5087. Crabtree, J. A. **Physiognomy of personnel: the facial characteristics of a factory staff.** *Character & Personality*, 1934, 2, 331-336.—A method is proposed for classifying the personnel of industry, namely, by means of composite silhouette profiles.—*M. O. Wilson* (Oklahoma).

5088. Dessoir, M. **Charakterologische Typen.** (Characterological types.) *Indus. Psychotechn.*, 1934, 11, 71-76.—As a basis of a typology, character must be considered in relation to the individual's view of the future life. Three character types are described: (1) the vegetative (*der Seinsmensch*), (2) the easy-going type (*der Lebensmensch*), and (3) the striving type (*der Leistungsmensch*).—*H. J. P. Schubert* (Transient Bureau, Buffalo).

5089. Döll, I. **Vorstellung und Gesamtpersönlichkeit.** (Representation and total personality.) Munich: Studentenhau, 1934. Pp. 35.—*R. R. Willoughby* (Clark).

5090. Engle, T. L. **A personality study of a group of high school honor society pupils.** *J. Appl. Psychol.*, 1934, 18, 293-296.—The range in IQ on the Otis Self-Administering Test (higher form) was from 90 to 121 with a median of 111.5. Correlations of school marks with intelligence, personality ratings, and Bernreuter personality inventory scores were in general insignificant.—*R. S. Schultz* (Psychological Corporation).

5091. Fauville, A. **Les recherches expérimentales sur l'organisation de la personnalité.** (Experimental studies on personality structure.) *Rev. des quest. scient.*, 1934, 53, 65-94.—An account of research studies and methods of research, principally statistical, which have been made relative to the factors constituting psychological personality, their mutual

relationships, and their relationship to physical traits, temperament, character, and morality.—*R. Nihard* (Liège).

5092. Ingle, D. J. **A test of mental instability.** *J. Appl. Psychol.*, 1934, 18, 252-263.—A review of previous work done with questionnaire tests (such as the Woodworth, Thurstone, Bernreuter) of "mental instability" does not reveal adequate validity. Two new questionnaires were constructed employing 3 criteria: (1) "an atypical answer to each question must occur in less than 25 per cent of the total group tested; (2) the set of questions must be highly consistent; and (3) each question must show definite value in discriminating between groups of college students classified on non-test bases (five-fold rating during interview) as 'stable' and 'unstable.'" Statistically reliable differences were found in mean scores between a group of 58 "stable" and 17 "unstable" college students.—*R. S. Schultz* (Psychological Corporation).

5093. Lersch, P. **Grundriss einer Charakterologie des Selbstes.** (Outline of a science of character of the self.) *Zsch. f. angew. Psychol.*, 1934, 46, 129-169.—The author points out that (the German) language contains many more terms and concepts related to character than are used in the scientific study of character, and he insists that it is the duty of the psychologist to enlarge the number of scientific concepts by taking into account the "pre-scientific" terminology. In a preliminary way he shows how this might be done by considering the tendencies and feelings grouped around the self. The social environment endows these tendencies and feelings with meaning and significance.—*K. F. Muenzinger* (Colorado).

5094. Lyon, V. W. **The use of vocational and personality tests with deaf.** *J. Appl. Psychol.*, 1934, 18, 224-230.—On the Minnesota Mechanical Tests 44, 36, and 20% of deaf high school boys score, respectively (in the groups based on Minnesota norms), below the 30th, 70th, and the 100th percentile. The Thurstone Personality Schedule shows that 30% of deaf high school boys and girls are either "emotionally maladjusted" or "should have psychiatric advice." The author questions the appropriateness of general norms and suggests that special standards should be determined for this group.—*R. S. Schultz* (Psychological Corporation).

5095. Meltzer, H. **Personality differences among stutterers as indicated by the Rorschach test.** *Amer. J. Orthopsychiat.*, 1934, 4, 262-280.—64 stutterers were given the Rorschach tests and the findings compared with the Rorschach results and those of Beck for the *Erfassungsmodi*, the quality of responses, content of responses, and originality.—*H. Peak* (Randolph-Macon).

5096. Perry, R. C. **A group factor analysis of the adjustment questionnaire.** *Univ. So. Calif. Educ. Monog.*, 1933-34, No. 5. Pp. 93.—This investigation was an attempt to discover how many independent factors are measured by the adjustment questionnaire, and in which questionnaires these factors are found. Using 328 applicants for admission to Long Beach

Junior College as subjects, the following questionnaires were administered: (1) Bernreuter series, (2) Pressey X-O, (3) Allport A-S, and (4) Colgate B2 and C2. Intelligence scores from the Thurstone Psychological Examination (1930 ed.) and achievement scores from the Iowa High School Content Examination were included in the data, which were subject to correlational, tetrad, and multiple-factor analysis (Thurstone). The author concludes on the basis of the results of these analyses that there are four independent (uncorrelated) group factors measured by the tests used, namely: (1) an "introversion" or "neurotic tendencies" group (synonymous); (2) a group found in tests claiming to measure "sufficiency" or "dominance"; (3) a group found in tests claiming to measure "dominance" and "ascendancy"; and (4) a group found in tests claiming to measure "intelligence" and "achievement." Each test studied also measures a factor attributable to chance and a specific factor not due to chance.—*R. Smith* (Clark).

5097. *Reh binder, H. Methoden und Anwendungsmöglichkeiten der Graphologie.* (Methods and applications of graphology.) *Indus. Psychotechn.*, 1934, 11, 107-112.—The methods of graphology are presented and their applicability discussed. The author feels that graphology can be a distinct help in characterology and the study of personality types.—*H. J. P. Schubert* (Transient Bureau, Buffalo).

5098. *Rohracher, H. Kleine Einführung in die Charakterkunde.* (Introduction to the study of character.) Leipzig, Berlin: Teubner, 1933. Pp. vi + 138. RM. 2.80.—This book deals with the most fundamental problems and the directions which character study is taking to-day, and discusses the practically useful systems like those of Kretschmer, Jung, Jaensch, Ewald, Pfahler, Klages, and Spranger. The advantages and limitations of character studies based on researches in medicine and natural sciences are shown as compared with those based on philosophy. The relation of character to heredity, sex, environment, and education is discussed. The bibliography includes the literature up to the year 1933.—*H. Rohracher* (Innsbruck).

5099. *Rosenzweig, S. A suggestion for making verbal personality tests more valid.* *Psychol. Rev.*, 1934, 41, 400-401.—"The opinion error enters as a considerable factor in tests of personality by such methods as the questionnaire." The subject's statements about himself are unreliable due to the fact that they are partly expressions of what he would like or thinks he would like to be. It is suggested that in constructing questionnaires, authors should have a considerable proportion of the questions begin with the words "I should like to be the sort of man who" and in this way the experimenter can at least gauge the extent of the opinion error.—*A. G. Bills* (Chicago).

5100. *Schulz, O. Experimentelle Untersuchungen über Lüge und Charakter.* (Experimental investigations on lying and character.) *Untersuch. z. Psychol., Phil. u. Päd.*, 1934, 8, No. 2. Pp. 60. RM. 3.—Only

those forms of lies are treated which are due to craving for superiority. The purpose of the experiment was not known to the subjects, but they were told that it was a competition and that the principal thing was to do as much as possible. The experiments were arranged in such a way that there was no necessity to lie, but it was possible for the subjects to do so. Later in an interview with the subjects, the motives for lying were analyzed.—*O. Schulz* (Kassel).

5101. *Spearman, C. Collaborons à la psychologie individuelle.* (Let us collaborate on individual psychology.) *Arch. de psychol.*, 1933, 24, 158-160.—A French translation of Spearman's appeal for collaboration on the determination of the characteristics of the principal personality traits.—*M. R. Lambercier* (Geneva).

5102. *Sperantia, E. Les théories personnalistes en Roumanie.* (Personalistic theories in Rumania.) *Arch. de psychol.*, 1933, 24, 156-158.—An account of the psychology of Radulescu-Motru, who advocates the personalistic theory and who has pointed out the relationships between personality and vocation.—*M. R. Lambercier* (Geneva).

5103. *Strehle, H. Analyse des Gebärdens.* (Analysis of gestures.) *Indus. Psychotechn.*, 1934, 11, 89-90.—Gestures are considered as secondary modes of expression to symbolize purposive acts. A study of such gestures is urged for developing character analysis.—*H. J. P. Schubert* (Transient Bureau, Buffalo).

5104. *Van Wimersma Greidanus, H. T. Instinct en karakter.* (Instinct and character.) Zeist: Vonk & Co., 1933. Pp. 134.—The first chapters of the book discuss some of the tendencies observed in characterological investigations. The psychic totality of the individual is determined by problems of heredity and pedagogy, characterology of both sexes and all ages, influences of nationality and race, of environment and occupation. The author suggests that the task of general characterology should be to build up a method of character analysis from one general psychological system and that character in general should be described by classification and ordering of character traits as encountered in daily life, not to discard these as inessential but to add from psychology whatever new qualifications are discovered. Following McDougall's formula of the cognitive, conative and affective differences of the instincts respectively, the remainder of the book is devoted to the construction of a characterology on an instinct-psychological basis. Character traits such as conceit, pride, ambition, vanity, dishonesty, etc., or any combination of these, are analyzed and traced to instinct reactions. The author concludes that the instinct-psychological typology and the instinct-psychological interpretation of character traits form together the basis of instinct characterology.—*C. Koster* (Huntington).

5105. *Vernon, P. E. The attitude of the subject in personality testing.* *J. Appl. Psychol.*, 1934, 18, 165-177.—Competition, economic reasons, miscellaneous obligations, personal interest, interesting material and indirect incentives are methods employed



in obtaining cooperation and proper rapport with subjects taking personality tests. It is suggested the indirect approach be developed further in personality testing and that more attention be paid to what the subject thinks about the test.—*R. S. Schultz* (Psychological Corporation).

5106. *Wiersma, E. D. Bodily build, physiological and psychological functions.* Amsterdam: Noordh. Uitg. Mij., 1933. Pp. 28. 1.50 f.—*R. R. Willoughby* (Clark).

[See also abstracts 4917, 4938, 5073, 5078, 5125, 5136, 5293, 5323, 5327.]

## SOCIAL FUNCTIONS OF THE INDIVIDUAL

5107. *Amitin-Shapiro, Z. L. Verovaniya i obryady sredneaziatskikh evreev, svyazannye s materinstvom i rannim detstvom.* (Ideas and customs of the Jews of middle Asia in relation to maternity and early childhood.) *Sovet. etnog.*, 1933, No. 3-4, 135-166.—The following questions are treated: popular views about birth and childlessness, magical and physical cure, abortion, pregnancy and "ishkan molon" (massage of the abdomen), "gudvish" (whims of the woman in childbed) the life of the child in the body of the mother according to the ideas of the Jews, foretelling of the sex of the child, magical influence on the sex of the child, special technique for greater facility in the delivery, customs in relation to navel and placenta, midwife, birth, diet of the woman in childbed, preservatives against evil spirits, death of the newborn, giving of names, circumcision, the first 40 days after birth, anniversary of the birth, dentition, nursing and weaning of the baby. A collection of material is given, with short notes and analogies.—*E. Kagarow* (Leningrad).

5108. [Anon.] *Lo stato mentale di Martin van der Lubbe.* (The mental condition of Martin van der Lubbe.) *Arch. di antrop. crim. psichiat. e med. leg.*, 1934, 54, 86-97.—A brief review of the case of Martin van der Lubbe, who was accused of having set fire to the Reichstag palace, and also a biography proving that he was mentally deranged and a homosexual.—*R. E. Schwarz* (V. A. Facility, Northampton, Mass.).

5109. [Anon.] *A selected bibliography on the physical and mental abilities of the American negro.* *J. Negro Educ.*, 1934, 3, 548-564.—The bibliography lays no claim to being exhaustive, but it is "the most comprehensive and up-to-date source on this topic that can be found at the present time." The 563 titles are divided into three groups; the first group comprises 91 titles and is headed "Investigations of Racial Differences Prior to 1910"; Part II is headed "Investigations of Racial Differences since 1910—Physical Traits," and consists of 153 titles; there are 319 titles in Part III under the heading "Investigations of Racial Differences since 1910—Mental Abilities."—*H. S. Clapp* (Children's Village, Dobbs Ferry, N. Y.).

5110. *Badley, J. H. The will to fuller life.* London: Allen & Unwin, 1933. Pp. 282. 10/6.—A

study in the psychology of values.—*F. C. Bartlett* (Cambridge, England).

5111. *Belknap, G. N. A guide to reading in aesthetics and theory of poetry.* *Univ. Oregon Publ.*, 1934, 4, No. 9. Pp. 91.—*R. R. Willoughby* (Clark).

5112. *Bills, A. G. The relation of stuttering to mental fatigue.* *J. Exper. Psychol.*, 1934, 17, 574-584.—The factual findings from these studies on the blocking tendency in normal and stuttering subjects are summarized as follows: (1) Stutterers block about twice as often as normal subjects in both vocal and manual responses. (2) The blocks of stutterers are significantly longer than those of normals in both types of performance. (3) The correlation between vocal and manual performance as to frequency and length of blocks is low. (4) The blocking of stutterers does not increase proportionately with fatigue as does that of normal subjects, at least for short working periods. (5) Stutterers with slow reaction time block more frequently and longer than those with quick reaction time. The theoretical significance of the findings is discussed.—*H. W. Karn* (Clark).

5113. *Bonnerjea, B. General index, annual reports of the Bureau of American Ethnology, vols. 1-48.* In *48th Ann. Report, U. S. Bur. Amer. Ethnol.*, 1933. Pp. 25-1220.—A subject, author and title index to an important series of reports.—*C. M. Louttit* (Indiana).

5114. *Braunhausen, N. Le bilinguisme et les méthodes d'enseignement des langues étrangères.* (Bilingualism and methods of teaching foreign languages.) *Centrale du P. E. S. de Belgique*, 1933. Pp. 134.—Studies with children indicate that bilinguals have lower intelligence and less mastery of the mother tongue. Experiments with different methods of presentation indicate a superiority of the direct method, i.e. presenting the actual object while speaking the name and writing it on the board.—*H. E. Burtt* (Ohio State).

5115. *Buss, O. Muttersprachliches Gestalten bewertet unter dem Gesichtspunkt der Ganzheit.* (Creation in the mother tongue evaluated from the point of view of totality.) *Zsch. f. angew. Psychol.*, 1934, 46, 170-209.—The author shows on the basis of compositions of high school students that one may distinguish between a creative and a utilitarian use of language. The former has its origin in psychic life (*in seelischem Geschehen*) and the latter in the perception of logical relationships. The chief purpose of instruction in the mother tongue must be to develop the creative use of language, which is characterized as a reproduction of the totality of psychic life. Compositions should be evaluated according to the degree in which they exhibit a totality.—*K. F. Muenzinger* (Colorado).

5116. *Caldwell, M. G. Is the reformatory reforming the prisoner?* *J. Juv. Res.*, 1934, 18, 90-102.—The author has studied the trends over a five-year period of certain characteristics in the population of the Ohio State Reformatory. The number of inmates

has increased 90.6% over that of 1920, while the general population of the state has increased 15.4%. Offenses against property comprised approximately 87% of all crimes for which the prisoners had been received. Among the offenders 51% fell between the ages of 16 and 20 years; 50% were feeble-minded; 83% were below average in intellect; 77% were unmarried; 78% were semi- or unskilled laborers; 23% were negroes; 3% were foreign-born; 68% had been arrested at least once previous to commitment; and 86% had pleaded guilty. Negroes and Protestants were groups among those considered who had contributed to the reformatory population many more than their frequency in the general population would lead one to expect. The incidence of parole from the institution increased 61% in a ten-year period, but the commitment rate was proportionally so much greater that serious crowding in the reformatory had resulted.—*H. L. Koch* (Chicago).

5117. Colucci, C. *La imputabilità in rapporto all'ubriachezza nel nuovo codice*. (Imputability in connection with drunkenness in the new penal code.) *Gius. penale*, 1933, 39. Pp. 23.—According to the author legislation formulated upon a biological basis and in accordance with experimental legal psychology should take into consideration crimes committed in a state of drunkenness and of psychic intoxication. It should distinguish between the imputability of the drunkenness and that of the crime.—*R. Calabresi* (Rome).

5118. Daniel, R. P. *Studies on race differences in non-intellectual traits, and in special abilities*. *J. Negro Educ.*, 1934, 3, 411-423.—Studies on racial differences in non-intellectual traits and special aptitudes are summarized. No significant racial differences are revealed. The need for understanding the differences in the culture of groups is emphasized. Attention must be paid to emotional patterns resulting from "social presumption and taboos." At the present date, tests used to determine non-intellectual traits and special aptitudes are not sufficiently reliable to warrant any interpretations concerning racial differences.—*H. S. Clapp* (Children's Village, Dobbs Ferry, N. Y.).

5119. Dearborn, W. F., & Long, H. H. *The physical and mental abilities of the American negro: a critical summary*. *J. Negro Educ.*, 1934, 3, 530-547.—The yearbook of the *Journal of Negro Education* is summarized by these two authors. This volume is the first attempt to bring together various trained viewpoints upon the problem of race differences. Negroes and whites have contributed to the volume. Everywhere the findings of previous experimenters are considered inconclusive and the older procedures of experimentation are criticized. One also finds that many of the earlier investigators were biased and incompetent to study the problem scientifically. The need for better technique and methodology is brought to the attention of those interested in race differences. A critical summary of the articles published in the 1934 yearbook is given.—*H. S. Clapp* (Children's Village, Dobbs Ferry, N. Y.).

5120. Di Domenico, M. *Moralità e libertà in una concezione estetica dell'universo*. (Morality and liberty in an esthetic conception of the universe.) Naples: Perrella, 1933. Pp. 29. L. 5.—*R. Calabresi* (Rome).

5121. Driggs, H. W. *The vocabulary of letters of boys and girls 12 to 15 years of age inclusive*. *J. Exper. Educ.*, 1934, 2, 339-354.—The written vocabulary found in boys' and girls' out-of-school letters was checked against the first 1000 words of the Thorndike list (Thorndike, E. L., *The Teacher's Word Book*, New York: Bureau of Publications, Teacher's College, 1921) with the following results: (1) Approximately 90% of the words used in these letters fall within the first 1000 of that list. (2) Approximately 85% fall within the first 500. (3) The second 500 words of this list are infrequently used by children. (4) The words used by boys and girls in their out-of-school letters not found in the Thorndike first 1000 seem to be more revealing of the child's individual interests and activities. (5) The boys in their letters show a higher percentage of words not in the first 1000 of the Thorndike list than do the girls.—*H. W. Karn* (Clark).

5122. Erkens, J. *La predisposizione individuale e le influenze ambientali sulla prostituzione*. (Individual predisposition and environmental influences upon prostitution.) *Arch. di antrop. crim. psichiat. e med. leg.*, 1934, 54, 8-15.—On the basis of her experience as chief of the women's police in Hamburg, the author corroborates Lombroso's theory on the close connection between female criminality and prostitution, as well as the theory that environmental influences are secondary to individual predisposition.—*R. E. Schwarz* (V. A. Facility, Northampton, Mass.).

5123. Essner, —. *Aus der Praxis der weiblichen Polizei in Kiel*. (From the practice of the Kiel police-women.) *Krim. Monatsh.*, 1934, 8, 133-135.—A report of two cases illustrating the social-service functions of policewomen.—*M. E. Morse* (Baltimore).

5124. Ferreri, G. *Contributi bibliografici sulle anomalie della voce e della parola*. (Bibliographical contribution on voice and speech anomalies.) *Lo Stato*, 1933. Pp. 61.—*R. Calabresi* (Rome).

5125. Fischer, E. *Graphologie als pädagogische Hilfswissenschaft*. (Graphology as a pedagogical auxiliary science.) *Sächs. Schulztg.*, 1933, 39.—The significance of graphology for the determination of character traits is emphasized. Handwriting may be thought of as a mirroring of the relationships between a child and its environment. Numerous examples are given.—*F. Trogsch* (Leipzig).

5126. Fischer, H. T. *Priestertalen*. (Priest languages.) The Hague: Wolters, 1934. Pp. 82.—Man in his efforts to contact supernatural powers has always felt the need of a special language, a mode of speaking apart from the common tongue. Sometimes this difference is so great that the language can be understood only by the initiated. Fischer would name such special languages "priest languages" and quotes

evidence of their existence in primitive tribes from all parts of the world. The author classifies the priest languages into two groups, the ceremonial and the spirit languages. An inquiry into the origin of the first tends to indicate that they are based on the ancient vocational language of those practising religious rites. (Complex civilizations have many vocational languages, e.g. medicine, science, etc.) Ceremonial languages have definite form, contain tribal tabu-words, archaisms, artificially coined words, etc. It is a conscious effort to contact the deity, serving as shield in the relation with the invisible world. The spirit languages, on the other hand, are entirely spontaneous. The medium is put in a trance and through him (her) the spirit speaks in abnormal language (glossolalia) or in a real language unknown to the medium in normal state (xenoglossia). In many tribes the ceremonial and spirit languages are both used, so that an interrelation and similarity of word-forms has been found generally in each language group.—C. Koster (Huntington).

5127. Frank-Kameneckii, J. G. *Ženščinagorod v bibleiskoi eskhatologii*. (Woman-town in the Biblical eschatology.) *Sbornik statei S. F. Oldenburgu Akad. Nauk*, 1934, 535-548.—The association of "woman" and "town" which is often found in the Bible is studied from the point of view of the psychology of religion of primitive people. In the poetry of the Old Testament we find everywhere the semantic identity of the people and the country, the mythological figure of the wife of Yahweh and the mother of the people. The union in a female being of the traits of a virgin, a mother and a harlot is explainable by the supplanting of the matriarchical world view by the patriarchal one, from which point of view the liberty and initiative of the woman are nothing but unchastity.—E. Kagarov (Leningrad).

5128. Freeman, F. N. *The interpretation of test results with special reference to race comparisons*. *J. Negro Educ.*, 1934, 3, 519-522.—Within any racial group there exists great individual variation. In race comparison the author calls attention to the importance of sampling and environmental conditions. The difficulty of obtaining a satisfactory status of either of these variables is pointed out. Results cannot be valid, however, until that is accomplished.—H. S. Clapp (Children's Village, Dobbs Ferry N. Y.)

5129. Garth, T. R. *The problem of race psychology: a general statement*. *J. Negro Educ.*, 1934, 3, 319-327.—The author gives a general statement of the problem of race differences. The need for freedom from bias is pointed out. There are three lines of attack to be taken in the solution of the problem, the popular, the near-scientific, and the scientific. In the past the first two have dominated. Garth gives his formula for determining race differences:  $R_1 E D = R_2 E D$ , in which  $R_1$  and  $R_2$  are two races (adequately sampled),  $E$  is an equal amount and kind of nurture and experiences, and  $D$  is an adequate measuring device. These problems are discussed in some detail.—H. S. Clapp (Children's Village, Dobbs Ferry, N. Y.)

5130. Gini, C. *Sulla nuzialità differenziale delle varie classi sociali*. (On the differential nuptiality of the various social classes.) *Metron*, 1933, 11, 111-116.—R. R. Willoughby (Clark).

5131. Gini, C. *Un nuovo fattore di selezione matrimoniale? L'ordine di generazione*. (A new factor in marriage selection? The order of birth.) *Metron*, 1933, 11, 117-132.—R. R. Willoughby (Clark).

5132. Groves, E. R. *Marriage and modern life*. (Child Welfare Pamphlets No. 36.) *Bull. State Univ. Iowa*, 1934, N. S. No. 747. Pp. 9.—Marriage is lifting itself from a social necessity or means of meager survival to an opportunity for human satisfaction. The changes taking place in marriage have to do largely with transference to the pleasure basis of living. Factors that are affecting marriage are that it is no longer a necessity, that there is a growing intolerance of hard circumstances, that it must be a mutual satisfaction, that it is facing competition, and that tradition is weakening. There should be education for marriage.—B. Wellman (Iowa).

5133. Gummersbach, H. *Affektbetonte Morde*. (Murder emotionally actuated.) *Krim. Monatsh.*, 1934, 8, 124-128.—Gummersbach studied the personality and motives of 40 murderers. He differentiates the constitutionally antisocial with pathologically defective feelings from those who are socially normal except for emotional lability and weak resistance to normal stimuli. The premeditated murder is carried out in a state of complete mental integrity with a conquest of normal inhibitions. In two-thirds of the male cases the motive was robbery. The amount of expected booty is ascertained beforehand; the victim is lured to a favorable spot, and dispatched with weapons brought for the purpose. "Emotional" murders are characterized by sudden "unmeasured" instinctive reaction to a situation, the use of any handy means, and lack of advantage from the act. As soon as the impulse is discharged, self-control returns, and the deed is often inexplicable to the doer because of the absence of ideational connections. In murders prompted by fanaticism the criminality lies in the paranoid aggressiveness with which an overvalued complex (not necessarily abnormal) is put through. The act is in response to an idea, a *Weltanschauung* (often a "mission") rather than against an individual.—M. E. Morse (Baltimore).

5134. Hall, G. M. *Prostitution: a survey and a challenge*. London: Williams & Norgate, 1933. Pp. 196. 7/6.—Various definitions of prostitution are considered. The present position in different countries is surveyed, and it is concluded that while professional prostitution is probably on the whole in decline, the amateur prostitute has increased greatly in numbers of late years. Causes leading to prostitution—economic, environmental, and, though less thoroughly, psychological—are discussed. The male side of the problem is briefly studied. Results of promiscuity and of sexual abstinence are set forth. The laws of many lands in relation to prostitution and their general effectiveness are described. In conclusion, the author issues a challenge against what



she calls "the new morality," and attempts to indicate how the social and psychological problems of prostitution might best be met.—*F. C. Bartlett* (Cambridge, England).

5135. **Hammond, W. A.** *A bibliography of aesthetics and of the philosophy of the fine arts from 1900 to 1932.* (Rev. ed.) New York: Longmans, 1934. Pp. x + 205.—Chapters on reference works, systematic and general works, history of esthetic theories, painting and the graphic arts, sculpture, architecture, civic art, poetry and the esthetics of literature, music (about 180 references), color (about 70 references), design and decorative art, style, origins of art and primitive art, symbolism, art and morality, art and religion, and art and psychology. This last contains about 180 references listed as general, 25 on empathy, and 60 on laughter, caricature and the comic.—*P. R. Farnsworth* (Stanford).

5136. **Harvey, O. L.** *The measurement of handwriting considered as a form of expressive movement.* *Character & Personality*, 1934, 2, 310-321.—Reliability and validity of handwriting as a measure of personality were tested in terms of 22 different measurable characteristics of the specimens. Reliability coefficients ( $\rho$ ), which ranged from .47 to .85 with an average of about .70, were obtained by correlating two samples prepared under different conditions. Validity was measured by correlating each characteristic with a psychoneurosis scale and an ascendancy scale. Zero-order coefficients (P-M) were very low, but by pooling certain of the dependent variables a multiple correlation coefficient of .80 was obtained for the neurotic scale and .60 for the ascendancy scale. Further research possibilities are suggested. (See also VIII: 5152.)—*M. O. Wilson* (Oklahoma).

5137. **Hellpach, W.** *Elementares Lehrbuch der Sozialpsychologie.* (Elementary textbook of social psychology.) Berlin: Springer, 1933. Pp. 165. RM. 7.80.—*R. R. Willoughby* (Clark).

5138. **Herskovits, M.** *A critical discussion of the "mulatto hypothesis."* *J. Negro Educ.*, 1934, 3, 389-402.—There are two "mulatto hypotheses," the author maintains. One takes the stand that racial crossings are dysgenic and the other that they are eugenic. Eugen Fischer's theory of domestication and its application to the study of race differences are summarized. Those making investigations both on the lower forms and on human groups have found that in any population the ancestry of the individuals making up the population determines the endowments of that stock.—*H. S. Clapp* (Children's Village, Dobbs Ferry, N. Y.)

5139. **Hofstra, S.** *Differenzierungserscheinungen in einigen afrikanischen Gruppen. Ein Beitrag zur Frage der primitiven Individualität.* (Phenomena of differentiation in some African groups. A contribution to the problem of primitive individuality.) Amsterdam: Scheltema & Holkema's Boekhandel N. V., 1933. Pp. viii + 214.—The author's problem is to investigate how far individual differences are shown among members of primitive tribes. The

material of this investigation is taken from the following African tribes: Thonga, Ba-ila, BaVenda, Bafioti, Dschagga, Ashanti, Ewe, Kpelle, Lango. Leadership and marriage are investigated. Conclusions: The traditional rules about succession in leadership are not completely rigid. By individual superiority of an applicant traditional regulations can be overcome. Also the choice of consorts is determined from an individual point of view, but only in certain cases and in varying degrees. Individual differentiations appear also in the field of religion, magic and medicine. There exists a kind of professional selection and the appearance of prophets can be explained only in this way. Also in the behavior of each single member of these primitive communities tendencies to differentiation can be shown.—*D. Rüssel* (Leipzig).

5140. **Howe, E. G.** *Morality and reality.* London: Howe, 1934. Pp. 136. 60/-.—A series of lectures in which an attempt is made to show how a "good morality" can be based on psychological considerations.—*F. C. Bartlett* (Cambridge, England).

5141. **Johnson, C. S., & Bond, H. M.** *The investigation of racial differences prior to 1910.* *J. Negro Educ.*, 1934, 3, 328-339.—This article gives a brief review of the work done on race differences prior to 1910. The study emphasizes the fact that the field is comprehensive and reveals the crudeness of the earlier attacks upon the problem.—*H. S. Clapp* (Children's Village, Dobbs Ferry, N. Y.)

5142. **Johnson, W.** *Stuttering in the preschool child.* (Child Welfare Pamphlet No. 37.) *Bull. State Univ. Iowa*, 1934, N. S. No. 748. Pp. 8.—There are at least one million stutterers in the United States. In about 85% of the cases stuttering began before the age of six years. Stuttering is a failure of the speech muscles to work in harmony. Its most important causes are physical, the most important single cause being interference with the development of the child's natural handedness. Psychological factors are not primary causes, but personality difficulties may be resultants. Suggestions are given for the treatment of stuttering.—*B. Wellman* (Iowa).

5143. **Kellermann, E.** *Beitrag zur Psychologie der Brandstiftung.* (Contribution to the psychology of incendiarism.) Jena: Neuenhahn, 1933. Pp. 35.—*R. R. Willoughby* (Clark).

5144. **Klineberg, O.** *Cultural factors in intelligence-test performance.* *J. Negro Educ.*, 1934, 3, 478-483.—Cultural factors play an important role in intelligence-test performance. The question of environment versus selective migration is discussed. The findings of the author's research show no evidence of selective migration. The difficulty of equating school and general culture of groups is pointed out.—*H. S. Clapp* (Children's Village, Dobbs Ferry, N. Y.)

5145. **Klug, J.** *Tiefen der Seele.* (The depths of the soul.) Paderborn: Schöningh, 1934. Pp. 463. RM. 6.30.—This is a moral psychology from the point of view of Catholicism. The psychic activity at the basis of good and bad actions is investigated.

The material is taken from the study of scientific literature, from observations in correctional institutions and mental hospitals, from official records, and from the writer's own experience in his ministerial work. Contents: (1) Psychic structure and psychic structural types. (2) Obscure powers (hereditary difficulties, acquired repressions, the constitution as a whole and its significance, genius and demon, Eros and sex). (3) Problematic natures. (4) Sceptics and autonomes. (5) Delusion and guilt. (6) The natural man. (7) Onset. (8) The end. Bibliography, index of subjects and names, genealogical examples.—*J. Klug* (Paderborn).

5146. **Kreusch, M. v.** *Neueste Forschungsergebnisse der praktischen Graphologie.* (The newest results of researches in practical graphology.) Berlin: Kreusch, 1934.—Graphology can be utilized for general purposes and in many different professions. It is useful for the choice of personnel, in occupational guidance, and in problems of marriage. It is also very significant for the understanding of the mentality of children. The following articles are contained in this year-book: Kreusch, M. v.: *Die Psychologie der Berufshandschriften* (The psychology of professional handwritings); Stephan: *Eheharmonie und Charakter* (Harmony in marriage and character); Gerstner, H.: *Charakterologie und Eheprognose* (Characterology and prognosis of success in marriage); Becker, M.: *Zum Studium der Kinderhandschriften* (The study of the handwriting of children).—*E. Eickenkel* (Leipzig).

5147. **Laslett, H. R., & Manning, J.** *A delinquency survey of a medium-size high school.* *J. Juv. Res.*, 1934, 18, 71-78.—The pupils in a medium-size high school were given the Laslett Test of Delinquent Tendencies, the Otis Self-Administering Test of Mental Ability, and the Murray inventory. Two years previous to the survey 33 pupils had taken the Laslett test and the scores from these were used to check the stability of the test findings. Case studies were made of the most unusual students to gauge further the validity of the instruments. The returns from the Laslett test correlated with those from the Murray inventory .160, with the Otis test .192, and with the Laslett test given two years earlier .222. The Murray inventory and IQ correlated .018. The correlations show that neither the delinquency test nor the inventory is measuring mental ability and that an interval of a few years may alter in marked degree relative standing on the Laslett test. The author discusses the significance of the latter finding in relation to the problem of the validity of the instrument.—*H. L. Koch* (Chicago).

5148. **Leonhardt, C.** *Psychologische Beweisführung in Ansehung existenzstreitiger Vorgänge.* (Psychological evidence in case of doubtful events.) *Zsch. f. angew. Psychol.*, 1934, 46, 229-245.—The author shows in the case of a long drawn out legal trial how the psychological factors correctly indicated the objective situation.—*K. F. Muenzinger* (Colorado).

5149. **Lukas, C.** *Die Psychologie der Notzucht.* (The psychology of rape.) Bonn: Kubens, 1932. Pp. 46.—*R. R. Willoughby* (Clark).

5150. **Markey, F. V.** *Variations in judgment.* *J. Appl. Psychol.*, 1934, 18, 297-303.—Judgments of chronological age and intelligence from Pintner photographs, by women college students in psychology, correlate poorly with actual age and intelligence-test scores.—*R. S. Schultz* (Psychological Corporation).

5151. **McCartney, J. L.** *The evaluation of classification in prisons.* *Amer. J. Orthopsychiat.*, 1934, 4, 225-232.—The author discusses the necessity of agreement between psychiatrists and their adherence to a scientific routine before their principles can be accepted by prison administrators. At present the psychiatric method has not been thoroughly tried out by any institution in the country.—*H. Peak* (Randolph-Macon).

5152. **Meloun, J.** *Handwriting measurement and personality tests.* *Character & Personality*, 1934, 2, 322-330.—In criticizing the experiment by O. L. Harvey (see VIII: 5136), Meloun points out that Harvey failed to take into consideration certain principles and rules which have been developed in experimental graphology and that his program of investigation was too narrow. That is, his statistical procedure was not well adapted to the specialized psychological field in which he was doing his investigating.—*M. O. Wilson* (Oklahoma).

5153. **Moreno, J. L.** *Who shall survive?* Washington: Nervous & Mental Disease Pub. Co., 1934. Pp. 435.—This book is a report on some experimental work which the author has done on the analysis and reconstruction of community and group life. The four major sections are: evolution of groups; the sociometry of groups; the construction and reconstruction of groups; and the sociometric planning of society. The analysis rests on the assumption that many individual maladjustments reflect group maladjustments and should be dealt with by adjusting the group relationships of the individual. Tests were developed to determine the desirable group associates on the basis of the spontaneous choices of the group members, and were given to children and adults in a number of the educational and correctional institutions of New York state. "The results suggest that the distribution and redistribution of the population within the given community on the basis of sociometric classification are a valuable aid" in dealing with socially disorganized individuals.—*R. E. Nelson* (Chicago).

5154. **Müller-Freienfels, R.** *Psychologie der Kunst. Bd. III.* (Psychology of art.) Munich: Reinhardt, 1933. Pp. 336. RM. 4.—This work, though complete in itself, forms at the same time the third volume of the author's work *Psychology of Art* (3rd edition). It deals with a problem which was treated only in a very sketchy way in the first two volumes, namely with the systematization of the single arts. Dance, poetry, music, decoration, architecture, plastic arts, painting, and drawing are discussed. The psychological presuppositions for the specifically artistic modes of expression are worked out, following the development from primitive art to modern art. In this way a psychological foundation

for the formation of special forms of art is found, which developed in the most different culture groups independently and yet often in astonishing parallelism. The author tries to throw a new light upon the problems of rhythm, the feeling of harmony, rhyme, perspective, composition in painting and plastic arts, architectonic space formations. The description starts in every case from concrete examples and tries to remain on strictly empirical grounds. The bibliography gives a survey of the whole field.—*R. Müller-Freienfels* (Stettin).

5155. Nystrom, G. H. The measurement of Filipino attitudes toward America by use of the Thurstone technique. *Proc. Iowa Acad. Sci.*, 1932, 39, 223-226.—A scale for measuring attitudes of Filipinos toward America was sent to approximately 100 Filipino students in America. Various degrees of prejudice were studied in relation to such factors as length of residence in America, geographical distribution, and extent of self-support. A correlation of .50 was found between prejudice against the United States and length of residence here.—*B. Wellman* (Iowa).

5156. Oelrich, W. *Das Ethos des Aiters*. (The ethos of old age.) Berlin-Charlottenburg: Fänger, 1934. Pp. 46.—*R. R. Willoughby* (Clark).

5157. Paikin, M. [Logopedia (orthopedia of speech) in the system of united dysphasia.] *Sovet. psikhonevr.*, 1932, No. 4, 26-33.—The organization and methods of work with speech-defective children with the schematic table are given.—*A. Yarmolenko* (Leningrad).

5158. Peterson, J. Basic considerations of methodology in race testing. *J. Negro Educ.*, 1934, 3, 403-410.—The author gives an example of naïve testing in the field of race differences. The pitfalls are pointed out and the need for adequate sampling is stressed. Other problems confronting the investigators in this field are discussed in some detail. There is need for more information about the influences of environmental factors. It is concluded that it may be better to discard gross scores such as IQ's and substitute special capacities and group factors as they become more easily differentiable by the studies made on any race.—*H. S. Clapp* (Children's Village, Dobbs Ferry, N. Y.).

5159. Pintner, R. Intelligence differences between American negroes and whites. *J. Negro Educ.*, 1934, 3, 513-518.—The adequacy of the intelligence tests used in testing the American negroes and whites, as well as the problem of fair sampling, are discussed in some detail. A tentative conclusion is drawn, namely, that the intelligence of the negro may turn out to be somewhat below that of the whites. The overlap of 25% as shown from present results indicates there are millions of negroes with intelligence above the average white. Further advance in the field of racial difference is dependent upon a better sampling and a more careful selection of measures of intelligence.—*H. S. Clapp* (Children's Village, Dobbs Ferry, N. Y.).

5160. Price, J. St. C. Negro-white differences in general intelligence. *J. Negro Educ.*, 1934, 3, 424-452.—Differences in general intelligence of negroes and whites are examined critically. Price concludes that there has been no "adequate comprehensive measurement of the intelligence of the negro." The investigators have not observed the fundamental conditions of measurement. The tests have been variously standardized. Some were standardized upon northern whites and others upon northern and southern samplings. The results are questioned, since they assume that the differences obtained are due to race in the biological sense. Price suggests that environmental and developmental factors may explain the differences. Under the caption "race inferiority hypothesis" the views of Pyle, Peterson, Pintner and Brigham are reviewed.—*H. S. Clapp* (Children's Village, Dobbs Ferry, N. Y.).

5161. Radin, P. *The method and theory of ethnology*. New York: McGraw-Hill, 1933. Pp. xv + 278. \$2.50.—An adverse criticism of most of the current and former methods in ethnology. The position is taken that the object of ethnological study is the historical, not the quantitative or natural-science, reconstruction and complete description of cultures; and that the ethnologist is committed to publishing his original material, accompanied by full description of the sources and his own attitudes and behavior, and by his own interpretative comments in the light of what is already known of the culture. The author exemplifies this technique by a treatment of three Winnebago documents of his own collection.—*R. R. Willoughby* (Clark).

5162. Remy, K. H. Der Fall "Tripp." Ein Beitrag zur Kriminalpsychologie des Lustmordes. (The Tripp case. A contribution to the criminal psychology of sex murder.) Heide in Holstein: Heider Anzeiger, 1934. Pp. 29.—*R. R. Willoughby* (Clark).

5163. Rhyne, J. J. Delinquency areas in Oklahoma City. *Proc. Okla. Acad. Sci.*, 1934, 14, 83-84.—The area having the lowest rate was a residential section occupied by people above the middle stratum of population in this city. Areas with the largest frequency of delinquency included no parks and few schools and enclosed the business districts. Rooming-house districts had a relatively high frequency of adult but few juvenile delinquents because few children live in these regions. Abstract.—*M. O. Wilson* (Oklahoma).

5164. Ricker, C. S. A critique of the defective delinquent law. *Law Soc. J.*, 1934, 3-20.—An analysis and critique of sections 113-124 inclusive, chapter 123 of the General Laws of Massachusetts. These statutes govern the commitment and release of defectives adjudged delinquent and committable for indeterminate periods. Once a mental defect has been established, the law does not define commitment in relation to offense. No criteria of incorrigibility to determine which delinquents are recidivists have been established, thus impairing the usefulness of transfer by commitment of delinquents. The law



does not adequately provide for parole of delinquents by experts in the field of mental defects.—S. H. Newman (Clark).

5165. Robinson, F. P. The role of eye movement habits in determining reading efficiency. *Proc. Iowa Acad. Sci.*, 1932, 39, 231-235.—Freshman students scoring low on a silent reading test were given training designed to improve efficiency of eye movements. The conclusion was reached that training in eye movement "pacing" resulted in improved reading efficiency mainly through increased rate of reading. Comprehension abilities as such were not changed by the training. There was a general transfer of improvement to other types of reading and to school work.—B. Wellman (Iowa).

5166. Rogers, K. H., & Austin, O. L. Intelligence quotients of juvenile delinquents. *J. Juv. Res.*, 1934, 18, 103-106.—A frequency distribution is given of the intelligence ratings of 3584 juvenile delinquents, the ratings in 80% of the cases having been obtained with the Stanford-Binet test, in 20% with the National Group Test of Intelligence. The age range covered was from 9½ to 16 years. The IQ's for the group distribute themselves in accordance with the normal frequency curve, the mean being at 82.2. Retests after intervals of 1 to 5 years for groups varying in size from 60 to 25 yield correlations with the first test which range from .63 to .82. The size of the test-retest correlations seems not to vary with the duration of the interval between examinations.—H. L. Koch (Chicago).

5167. Rosenthal, S. P. Racial differences in the incidence of mental disease. *J. Negro Educ.*, 1934, 3, 484-493.—Hospital statistics, at present, do not weight the factors of sex distribution, age distribution, urban and rural distribution, and socio-economic factors. For these reasons investigators are not justified in claiming racial differences in mental diseases until those pitfalls are overcome.—H. S. Clapp (Children's Village, Dobbs Ferry, N. Y.)

5168. Saudek, R. Anonymous letters: a study in crime and handwriting. London: Methuen, 1933. Pp. 142. 5/-.—Discusses, with a number of illustrations, the reliability of the judgment of handwriting experts in regard to forgeries.—F. C. Bartlett (Cambridge, England).

5169. Schneickert, H. Verfälschung der eigenen Unterschrift. (Falsification of one's own signature.) *Arch. f. Krim.*, 1934, 94, 177-180.—The presence of a protest, uncertainty or mental reservation in subscribing to a document often betrays itself by a change in the signer's handwriting or a falsification of his signature with intent to repudiate it later. Experience with the latter type of case is as yet small and the literature scanty. Schneickert discusses several instances in his practice as handwriting expert. To change one's signature beyond recognition is very difficult without intention and practice, but more difficult still is the proof of intentional falsification. The methods employed are the use of a foreign script or a copybook handwriting which suppresses all individual characteristics; complete illegibility; and

simulation of a drunken person's script.—M. E. Morse (Baltimore).

5170. Schuppe, —. Warum vermehrte Sittlichkeitsdelikte? (Why have sex crimes increased?) *Krim. Monatsh.*, 1934, 8, 139-140.—The author discusses only attacks on children. While serious crimes have decreased about one-half under the Third Reich, arrests for sexual crimes have almost doubled. Schuppe considers that the increase is more apparent than real. Under the Marxist régime, punishment of all criminals was exceedingly lax. The revolution has had a very favorable moral effect. The new law concerning habitual criminals not only punishes sex delinquents severely, but above all works prophylactically by making them harmless through sterilization. The public knows this and also realizes more keenly the necessity of protecting children. The campaign is only begun. As soon as sterilization can be carried out ruthlessly, sex crimes will decrease.—M. E. Morse (Baltimore).

5171. Sergeev, V. I. Dinamika fizicheskogo razvitiya Buryat. (The dynamics of the physical development of the Buryats.) *Antrop. zh.*, 1932, 2, 105-122.—The Buryats of the cattle-breeding district remain behind the Buryats of the agricultural district in physical development, particularly in the period of puberty. In the case of adults, on the contrary, the physical development of the cattle breeder is considerably higher than that of the farmer. The explanation of this distinction is given by the fact that the meat and milk products contain very little vitamin E, which are very necessary for the development and the normal function of the sex glands.—B. N. Vishnevski (Leningrad).

5172. Smith, C. E. A new approach to the problem of racial differences. *J. Negro Educ.*, 1934, 3, 523-529.—The following method is suggested to enable the investigator to understand more accurately the meaning of underlying differences in the score obtained from a program of testing racial differences. After an extensive battery of reliable tests has been administered to two carefully selected white and negro groups, factor analysis techniques should be used. Each factor should be considered separately. Tetrad analysis should next be used to select from this battery material which would measure one general factor. The next step is to compare the degree of saturation of these tests with the factor concerned with the degree of difference between the scores on the sub-tests. The final step shows a method for equalizing the degree of factor saturation. In this way a better interpretation of differences in score could be secured.—H. S. Clapp (Children's Village, Dobbs Ferry, N. Y.)

5173. Tait, J. Evolution of vertebrate voice. *Acta otolaryngol.*, 1934, 20, 46-59.—"Voice" in fish and frogs is merely a sexual call. In man it has been put to much wider usage. The air sacs in frogs and whales are amplifiers for air that is retained rather than exhaled. The air-bladder of Dipnoi or lung-fishes may have its origin as an organ of voice rather than

of respiration. Bibliography.—*M. B. Mitchell* (New Hampshire State Hospital).

5174. *Testa, A. Il carattere di realtà immediata nell'espressione artistica.* (The character of immediate reality in art expression.) Imola: Imolese, 1933. Pp. 19. L. 3.—The form and content of an expression of art are identical realities which cannot be distinguished from each other: the expression is the actuation, the realization of the content. In its immediate identity with the content it assumes its significance. In regard to the question of what affects the value of the technical means used, the author believes that this value is entirely unreal: a technique which is false or fantastic is rendered null by the spontaneous action of the mind, while true technique is itself art in concrete form.—*R. Calabresi* (Rome).

5175. *Thompson, C. H. The conclusions of scientists relative to racial differences.* *J. Negro Educ.*, 1934, 3, 494-512.—A brief questionnaire was sent to a group of leading psychologists, educators, sociologists and anthropologists in an effort to determine what generalizations are warranted in the methods employed in investigations of racial differences, and in the data obtained. The scholars questioned agreed, in general, that in racial differences experimentation to date has failed to demonstrate any inherent mental differences between the negroes and whites of America. The "mulatto hypothesis" that negroes with white blood are inherently different mentally from negroes with less white blood was not corroborated. Only 4% indicated that experiments to date reveal inherent mental differences. The respondents considered the testing procedures and the validity of the tests questionable or ambiguous. Two small minorities of opposing views concluded that the data show the American negro to be "inferior" or "equal" to the American white. The available facts to date tend to favor the latter view.—*H. S. Clapp* (Children's Village, Dobbs Ferry, N. Y.).

5176. *Tittel, K. Untersuchungen über Schreibgeschwindigkeit.* (Investigations on speed of writing.) Munich: Beck, 1934. Pp. 54.—*R. R. Willoughby* (Clark).

5177. *Turchaninov, G. I. Osnovnye principy razvitiya slova.* (The fundamental principles of word development.) *Yafeticheskii Sbornik*, 1932, 7, 19-35.—One of the fundamental laws of word development is the law of the connection of the word in its concrete meaning with the surrounding reality through its functional-semantic idea, which combined with the forms of thought constitute the relation of the word to reality. In this consists the principle of the inner word form. One word can be put in the place of another only in the case when the functional semantic idea, realized in the words, had the same course of development, which led to the same results, even though the development shows deviations in particulars. The external phonetic form of the word has no independent deciding effect, but it is conditioned by social practice and depends upon the inner form of the word.—*E. Kagarov* (Leningrad).

5178. *Unwin, J. D. Sexual regulations and human behaviour.* London: Williams & Norgate, 1933. Pp. xv + 108. 7/6.—There are four main patterns of human culture: the zoistic, the manistic, the deistic, and the rationalistic. These also represent an order of development. The first possesses neither temples nor regard for the dead; the second possesses regard for the dead, but no temples; the third has both temples and regard for the dead; the fourth, hardly as yet fully achieved, moves away from conventional rites of all kinds. A very large number of primitive and semi-primitive groups are surveyed and the data of their culture studied in relation to the classification proposed. It is maintained that the facts show that advance from one stage to a later goes *pari passu* with the restriction of sexual opportunity, and especially of pre-nuptial sexual opportunity. The author thinks that change of culture is ultimately a psychological phenomenon, depending basically upon a release of mental energy due to sexual continence. An attempt is made to set forth the implications of the view for the future development of society.—*F. C. Bartlett* (Cambridge, England).

5179. [Various.] *The work of the psychologist in a penal institution—a symposium.* *Psychol. Exch.*, 1934, 3, 49.—*J. F. Dashiell* (North Carolina).

5180. *Vinnikov, I. N. Legenda o prizvanii Muhammad v svete etnografii.* (The legend of the calling of Mohammed in the light of ethnography.) *Sbornik statei, S. F. Oldenburgu, Akad. Nauk*, 1934, 125-146.—The legend of the calling of Mohammed can be traced back to two principal forms. The first contains three principal features: (1) Visions persecute and torment the visionary; he withdraws to the mountains. (2) The highest spirit announces to him his election and commands him to become a prophet. Mohammed resists. (3) The spirit appears in all his splendor and magnificence. Every opposition is now useless, and Mohammed takes upon himself the prophetic mission. The writer analyzes single traits of the legend, the visions, the role of the water, etc. According to the second version of the legend Mohammed tries to obtain the prophetic gift. Both forms are purely Arabic. The version of the passive behavior of Mohammed is the earlier. Its analogy is found in the psychology of Siberian shamanism. The shaman appears in the clan in consequence of his "psychophysical constitution," but he is not separated from other men. After the full development of the gentile organization shamanism becomes a hereditary profession.—*E. Kagarov* (Leningrad).

5181. *Vogelsang, H. Beruf und Kriminalität.* (Occupation and criminality.) *Indus. Psychotechn.*, 1934, 11, 116-119.—The characteristics of the criminal population have changed from what they were before the war. Unemployment has driven the youngster just finishing school into behavior arousing the attention of the police. The age distribution of 1000 prisoners up for trial has a mode at 23 years, with 50% of the cases less than 25 years old. Of boys between 15 and 23 brought into court, 39% were unskilled workers, 36% were skilled or semi-

skilled, 13% were apprentices, and 12% had miscellaneous occupations.—*H. J. P. Schubert* (Transient Bureau, Buffalo).

5182. **Watson, N. A.** The hearing and understanding of speech. *North. Calif. Yrbk. Educ. Excep. Child.*, 1933, 4, 49-58.—The author discusses the three factors which influence the hearing and understanding of speech in the school-room. Of these three—the speaking voice of the teacher, the acoustics of the class-room, and the auditory acuity of the children—the third is of the greatest importance. He discusses methods of handling the slightly deafened child by placing him near the teacher, and for those whose audiograms are between 40 and 80 decibels modern hearing aids are recommended.—*C. V. Hudgins* (Clarke School).

5183. **Wikerson, D.** Racial differences in scholastic achievement. *J. Negro Educ.*, 1934, 3, 453-477.—Keeping the limitations of the available information ever in mind, the author compares the relative scholastic achievement of negro and white children in the elementary and high schools of the same system. He has critically evaluated the findings and technique of these studies and reached the following conclusions: In segregated school systems particularly, negro children in general have a lower school achievement than white children in the same grades in the same system. Second, in both races there are individuals falling in the upper and lower quartiles of scholastic achievement. The major causes of race differences in school achievement are thought to be race differences in home and school environment. The last section of this article deals with the limitations in technique.—*H. S. Clapp* (Children's Village, Dobbs Ferry, N. Y.).

5184. **Wisse, J.** Selbstmord und Todesfurcht bei den Naturvölkern. (Suicide and the fear of death among primitive peoples.) Zutphen: Thieme, 1933. Pp. vii + 548. fl. 7.90.—The suicides of 375 primitives were studied to determine the causes and conditions of their occurrence. There were relatively few cases among extremely primitive groups. Great emotionality together with insufficient activity and inadequate secondary functions seem to be the responsible sources of these suicides. There was a predominance of female suicides. Religious factors were of minor importance except as they served to still the fear of death. Bibliography.—*J. Wisse* (Amsterdam).

5185. **Zelenin, D. K.** Razvitie predstavlenii o zlykh dukhakh v primitivnom chelovecheskom obshchestve. (The development of ideas of bad spirits in primitive society.) *Antireligioznik*, 1933, 8, No. 4, 13-15.—In the genetic history of the ideas of spirits three stages can be distinguished: (1) In the pre-clan society the idea of invisible secret enemies was based upon experience with dangerous animals, insects, serpents, etc., which were assumed to be bad spirits. (2) Much later the idea of good spirits was developed, whose model was the idea of confederates, first of all of confederates of exogamous groups. The useful totem animals served as the basis for the development

of the idea of good spirits. The primitive man contracted alliances with the useful totem animals and their spirits. (3) At the stage of the formation of social classes the spirits change into beings which ask flattery and homage.—*E. Kagarov* (Leningrad).

5186. **Zelenin, D. K.** Religiozno-magicheskaya funktsiya folklornykh skazok. (Religio-magic function of the folk story.) *Sbornik statei S. F. Oldenburgu, Akad. Nauk*, 1934, 215-240.—The earliest form of popular tales was invented by primitive hunters for animals, to which the knowledge of human language was attributed. The hunters tried to allure the animals in this way, first by hunting pantomimes, then by magic rites, and later by the spell of words, songs and telling of fairy tales in order to capture them. At a later stage of development animals were replaced by spirits of the forest. Numerous prohibitions to tell the stories at certain times and under certain circumstances are connected with the fear of demons, who like to listen to the tales. Thus the beginning of the telling of fairy tales is in a way connected with animal psychology, as primitive men imagine this psychology.—*E. Kagarov* (Leningrad).

[See also abstracts 4855, 4873, 4882, 4892, 4907, 4988, 5010, 5011, 5024, 5030, 5035, 5040, 5041, 5049, 5066, 5079, 5083, 5095, 5097, 5100, 5103, 5252, 5275, 5281, 5282, 5285, 5300, 5301, 5305, 5316, 5320, 5322.]

## INDUSTRIAL AND PERSONNEL PROBLEMS

5187. **Andrew, D. M., & Paterson, D. G.** Measured characteristics of clerical workers. *Bull. Employment Stabilization Res. Inst., Univ. Minn.*, 1934, 3, Pp. 60.—This bulletin is chiefly devoted to the presentation of data concerning some of the measured characteristics of clerical workers. The tested abilities of clerical workers were first compared with those of workers in general. The various grades and classes of clerical workers were also studied in order to determine any aptitudes that might differentiate among them. Finally, the abilities of employed clerical workers were studied in relation to the abilities of unemployed clerical workers in order to determine possible differences between successful and presumably less successful clerical workers. In all these comparisons the most sensitive instrument of measurement was the Minnesota Clerical Test. The relation of the Minnesota Clerical Test to the Scott Company's File Clerk's Test and the Hoke Prognostic Test of Stenographic Ability is considered.—*H. W. Karn* (Clark).

5188. **Blank, G.** Die methodischen Voraussetzungen der diagnostischen Brauchbarkeit der Reaktionsmessungen bei psychotechnischen Kraftfahrerprüfungen. (Methodological premises of the diagnostic applicability of reaction measurements in the psychotechnical examination of drivers of motor vehicles.) *Dresden: Dittert*, 1933. Pp. 91.—The results of this investigation are drawn from 48,000 simple and choice reaction measurements in the visual field. The values follow with great exactness the curve of Gauss. To



obtain diagnostically valid values it is necessary to have in each of three groups some 50 measurements, of which the first group is to be disregarded. The exact values of inter-individual and intra-individual reaction times and the distributions are calculated. The author emphasizes that for reliable reaction times not the average of many measurements is to be taken, but the average and the threefold distribution must be taken into account.—G. Blank (Köln-Poll).

5189. Calò, G. *Psicotecnica e scuole professionali*. (Psychotechnics and professional schools.) *Vita scol.*, 1934, 5, No. 2.—In contrast with the scientific and technical progress made in professional orientation, the author observes that a practical application of psychotechnics in scholastic fields seems everywhere to be limited. The more modern conceptions of psychotechnics, which deal with a synthetic consideration of individual personalities, are very superior to estimates founded on data obtained from special tests. Therefore at the present time it should be a very easy matter to introduce psychotechnics into the schools. Calò stresses the necessity of giving instructors a sound psychotechnical preparatory training.—R. Calabresi (Rome).

5190. Couve, R. *Reichsbahnwerbung*. (Advertising the government railways.) *Indus. Psychotechn.*, 1934, 11, 129-138.—Psychotechnology can further the art of advertising by determining the best forms of advertisements as to attention getting, memory value and convincingness.—H. J. P. Schubert (Transient Bureau, Buffalo).

5191. Dölger, I. *Zeit und Güte bei Leistungsproben*. (Time taken and excellency of result in performance tests.) *Indus. Psychotechn.*, 1934, 11, 151-155.—A formula is given for the weighting of time and excellency measures in tests to procure the most predictive results. For a miniature test of lathe work, it was empirically determined that weighting the time score by unity and the excellency score progressively more from good, two, to bad, six, gave results which agreed closely with industrial results.—H. J. P. Schubert (Transient Bureau, Buffalo).

5192. Estoup, J. H. *Étude psychotechnique de la commande des machines à écrire par le moteur humain*. (Psychotechnical study of the operation of typewriters.) *Trav. humain*, 1934, 2, 186-203.—Discussion from the standpoint of engineering design of the various parts of the typewriter. A study of operators of different degrees of proficiency was made with reference to interval between strokes and time the key is held down before release. Requirements for a psychotechnically perfect machine are formulated. No single existing machine meets all these requirements, but a satisfactory combination could be made.—H. E. Burtt (Ohio State).

5193. Fiorentini, R. *Il rendimento del lavoro nell'economia corporativa*. (Work output under community management.) *Lo Stato*, 1933. Pp. 14.—R. Calabresi (Rome).

5194. Freiburg, N. *Die Auswahl von kaufmännischem Büropersonal auf psychotechnischer Grundlage*.

(The selection of commercial office personnel by means of psychotechnical method.) *Emadetten i. Westf.*: Lechte, 1933. Pp. vi + 89. RM. 2.90.—The author does not deal in this work with single investigations in the field and does not propose new methods, but gives a summarizing account and critical review of the methods already in use and the possibilities of their practical applicability. First he analyzes the activities required in commercial offices. Then he describes the various psychotechnical methods used for the selection of commercial office personnel. In the criticism of these methods the author arrives at the conclusion that none of the existing methods can claim to be complete, and in spite of some valuable knowledge we are still in an exploratory stage. Cooperation between managers and psychologists is needed. The scientist should not forget in such investigations the question of practical applicability. An extensive bibliography is given.—N. Freiburg (Iserlohn).

5195. Giese, F. *Psychologie als Lehrfach und Forschungsgebiet auf der Technischen Hochschule*. (Psychology as branch of study and research in the technical school.) Halle a. S.: Marhold, 1933. Pp. 46. RM. 1.50.—This is a ten-year report of the head of the psychology laboratory of the Technische Hochschule in Stuttgart, and aims to show how general and applied psychology has developed at a German school frequented by engineers, architects, natural scientists, etc. The titles of the chapters are: (1) aim of instruction and research, (2) lectures and discussions, (3) the psychological laboratory, (4) the psychological researches, and (5) the collaboration of the technical school with psychological vocational guidance duties of the labor office of southwest Germany, which comprises the provinces of Baden and Württemberg and has 35 examination boards with a unitary controlled procedure worked out by the writer. Detailed accounts are given of all fields of work and forms of organization in instruction and research during the last ten years in Stuttgart. Finally there is a bibliography of the 67 important publications of the Institute. A further chapter deals with the new psychological program in the new Germany.—F. Giese (Stuttgart).

5196. Giese, F. *Arbeitsauffassung im Wandel der Zeiten*. (Changes in the concept "work" with course of time.) *Indus. Psychotechn.*, 1934, 11, 65-71.—In ancient times work and freemen were antonymous concepts; then work was regarded as a legitimate occupation; subsequently, as a commodity. It is, however, only recently that it is being considered as the most worth-while experience of civilized living. Applied psychology should determine the optimal working conditions for the best interests of the laborer.—H. J. P. Schubert (Transient Bureau, Buffalo).

5197. Hall, O. M. *Attitudes and unemployment. A comparison of the opinions and attitudes of employed and unemployed men*. *Arch. of Psychol.*, 1934, No. 165. Pp. 65.—Two groups of professional engineers, differing in employment status, were

matched as regards age, normal earning power, education, state licensing, etc. Their attitudes toward employers, religion, and their occupational morale were measured. 68% of the unemployed were more bitter toward employers, 75% had poorer "occupational morale" and 58% were more critical of religion than was the median employed man. Unemployed men in the thirties were, on the average, most bitter toward employers and had the lowest occupational morale. Being unemployed does affect men's attitudes. Work attitudes of the youngest men had been least affected. The report is given in great detail with a copy of interviewing material.—E. M. Achilles (Columbia).

5198. Hilpert, A. **Arbeitsbestgestaltung durch Arbeitsfreude.** (Securing the best working conditions through joy in work.) *Indus. Psychotechn.*, 1934, 11, 120-122.—Working conditions should be such as to engender the utmost joy at work. They should prevent fatigue and through sufficient wages bring increased production.—H. J. P. Schubert (Transient Bureau, Buffalo).

5199. Hoppock, R., & Hoppock, M. Do people like their jobs? *J. Adult Educ.*, 1934, 6, 290-292.—The authors had 309 residents of New Hope, Pennsylvania, constituting 85% of the employed adult population, answer a series of questions, among which was the following: "Which gives you more satisfaction—your job, or the things you do in your spare time?" 66% answered "My job." They raise the question of the meaning of this finding in reference to education for leisure.—R. Smith (Clark).

5200. Husband, R. W., & Godfrey, J. An experimental study of cigarette identification. *J. Appl. Psychol.*, 1934, 18, 220-223.—In a "blind-fold" laboratory test the average percentage of correct identification in brand of cigarette used is slightly better than chance.—R. S. Schultz (Psychological Corporation).

5201. Keller, F. J. The first year: annual report of the National Occupational Conference. *Occupations*, 1934, 12, 86-99.—R. R. Willoughby (Clark).

5202. Koepke, C. A. A job analysis of manufacturing plants in Minnesota. *Bull. Employment Stabilization Res. Inst., Univ. Minn.*, 1934, 2, 271-316.—The main problems studied were (1) the economic conditions and personal and psychological traits of the worker, and (2) the training of the worker. The data were recorded under four headings: (1) identification of the operation, (2) the worker, (3) the work, and (4) the machine. By methods of comparison, it was found that plants producing the same products do not always use the same methods of production. Highly significant is the fact that operations in different plants of the same industry and frequently in plants of different industries are basically similar.—S. H. Newman (Clark).

5203. Kupke, E. **Normung der Schreibarbeit bei Zeitstudien.** (Standardization of time study symbols.) *Indus. Psychotechn.*, 1934, 11, 113-116.—A set of symbols for use in time studies is suggested.—H. J. P. Schubert (Transient Bureau, Buffalo).

5204. Leupold, R. **Lehrlingsprüfung bei den Schweizerischen Bundesbahnen.** (Apprentice testing for the Swiss railroads.) *Indus. Psychotechn.*, 1934, 11, 76-79.—A short description is given of a battery of tests for apprentices at skilled work. The tests include those of geometrical insight, cutaneous sensitivity, manual dexterity, and practical ability.—H. J. P. Schubert (Transient Bureau, Buffalo).

5205. Mauritz, H. **Psychotechnik des Pressenschutzes.** (Psychotechnology of punch press guards.) *Indus. Psychotechn.*, 1934, 11, 97-106.—The qualities required in a punch press operator are motor coordination, accuracy and swiftness of hand movement, and minimal susceptibility to distraction and fatigue. Due to the manifold operations performed on presses, no one safety device can be put to universal use. Two hand levers decrease output seriously. An operating foot pedal and a shield sliding before the punch form a combination yielding good production and safety.—H. J. P. Schubert (Transient Bureau, Buffalo).

5206. Meyerheim, H. **Fehlerprüfstelle in Grossbetriebe.** (A department for investigating errors in a large concern.) *Indus. Psychotechn.*, 1934, 11, 138-140.—In each large industrial concern certain errors frequently recur to lessen the efficiency. Therefore, all errors should be reported to a centralized error investigating department. From a study of causes, steps can be determined which should diminish such errors.—H. J. P. Schubert (Transient Bureau, Buffalo).

5207. Myers, C. S. **Business rationalisation.** Its dangers and advantages considered from the psychological and social standpoints. London: Pitman & Sons, 1932. Pp. 76.—R. R. Willoughby (Clark).

5208. Paterson, D. G. [Ed.] **Proceedings of the Minnesota state conference on vocational guidance.** *Bull. Employment Stabilization Res. Inst., Univ. Minn.*, 1934. Pp. 24.—An attempt to organize guidance workers so that they might present a summary of present problems and formulate solutions of these problems. Structural committees, dealing with the guidance problems of the high school and of employment agencies, stressed the need for (1) more and better trained counselors in education and industry, (2) the adoption and use of cumulative records, and (3) research to provide better means of diagnosing the individual. The functional committees, attempting to meet major guidance problems, recommended that large-scale fact-finding be instituted to bring traditional education and the practical demands of life into closer alignment. Improved methods of guidance should disseminate these facts and enable them to be used advantageously.—S. H. Newman (Clark).

5209. Uhrbrock, R. S. **The importance of psychology.** *Indus. Med.*, 1934, 1-10.—The author discusses the value of a psychological approach to the problems of selection and training of industrial employees.—H. W. Karn (Clark).

5210. Weber, W. **Psychologisches Berufsbild des Juristen.** (Psychological occupation analysis of the

practice of law.) *Indus. Psychotechn.*, 1934, 11, 79-84.—An analysis of the activities of lawyers should lead to a basis for an occupational aptitude test which would insure fewer mistakes in the choice of this career.—*H. J. P. Schubert* (Transient Bureau, Buffalo).

5211. *Wedemeyer, E. A.* *Orientierung bei Nacht auf Autobahnen.* (Orientation on the highway at night.) *Indus. Psychotechn.*, 1934, 11, 84-85.—To diminish automobile accidents at night, it is recommended that white lines be put on the road. These should be marked to show crossings, curves, and construction.—*H. J. P. Schubert* (Transient Bureau, Buffalo).

5212. *Welch, H. J., & Miles, G. H.* *Industrial psychology in practice.* London: Pitman & Sons, 1932. Pp. 249.—*R. R. Willoughby* (Clark).

5213. *White, L. D.* *Further contributions to the prestige value of public employment.* *Chicago Univ. Soc. Sci. Stud.*, 1932, No. 24. Pp. 88.—*R. R. Willoughby* (Clark).

5214. *Winkelmann, H.* *Der Vorteil von Grünanlagen im Betriebe.* (Returns to industry from investments in shrubbery.) *Indus. Psychotechn.*, 1934, 11, 86-88.—Simple plantings in the courts and by the roadsides of industrial grounds tend to induce joy at work, good health, neatness, cleanliness, and safety.—*H. J. P. Schubert* (Transient Bureau, Buffalo).

5215. *Winkelmann, H.* *Heizerausbildung für Dampfkesselbetriebe.* (Training of firemen for steam boilers.) *Indus. Psychotechn.*, 1934, 11, 122-125.—Modern improvements in power plant boilers necessitate more rigorous training of firemen than previously. General descriptions of the aptitude testing and the course of instruction are given. The cost of such training is discussed.—*H. J. P. Schubert* (Transient Bureau, Buffalo).

[See also abstracts 4863, 4948, 4951, 5102, 5322.]

#### EDUCATIONAL PSYCHOLOGY

5216. *Betts, E. A.* *An evaluation of certain techniques for the study of oral composition.* *Res. Stud. Elem. School Lang.*, No. 1, *Univ. Iowa Stud.: Stud. Educ.*, 1934, 9, No. 2, 7-32.—A critical evaluation was made of five techniques in the field of oral English. An apparatus for electrical recording was developed, which proved to be superior to the other techniques of court reporting, shorthand reporting, longhand reporting and phonetic transcribing. For case study research the electric recording apparatus is recommended as the most economical and accurate method of recording oral language activities.—*B. Wellman* (Iowa).

5217. *Bontrager, O. R.* *An experimental appraisal of pupil control of certain punctuation items.* *Res. Stud. Elem. School Lang.*, No. 1, *Univ. Iowa Stud.: Stud. Educ.*, 1934, 9, No. 2, 33-62.—An analysis of style manuals of correct usage in punctuation was first made in order to determine technical words, main

ideas, and grammatical variations. An appraisal was then made of pupil control of certain items of punctuation. 553 children in grades 6, 8, 10 and 12, with IQ's 90 to 110, were tested. Results are presented in terms of difficulty of punctuation items and relation to teaching practice.—*B. Wellman* (Iowa).

5218. *Caldwell, F. F., & Mowry, M. D.* *Teachers' grades as criteria of achievement of bilingual children.* *J. Appl. Psychol.*, 1934, 18, 288-292.—The relationship between scores in English and history on a home-made objective test and the New Stanford Achievement Test is as high or higher for Spanish-American children as for Anglo-Americans in the 3rd to 8th grades; but the objective test scores correlate with teachers' grades consistently lower for the Spanish-American children than for the Anglo-Americans. The authors suggest that these results indicate a "halo" effect which tends to give lower grades to the Spanish-American children than their actual knowledge of the subject indicates.—*R. S. Schultz* (Psychological Corporation).

5219. *Converse, P. D.* *The work of the college professor.* *J. Higher Educ.*, 1934, 5, 299-304.—The many activities of a teacher in a college are outlined under six headings: teaching, scholarship, research, professional and civic service, student leadership, and administration. The author maintains that "the first duty of the college professor is to be a good teacher" and that promotion and discharge should be based primarily on teaching and scholarship. Activity in all of the above six divisions should not be expected. A teacher should be rated as a teacher, as a scholar, and in one other division. "The special aptitudes of the men should be discovered, and they should be encouraged to do their third division of work in the fields for which they are especially adapted and in which their services are most needed by the institution."—*R. A. Brottemarkle* (Pennsylvania).

5220. *Davis, R. A., & Campbell, W. A.* *A more valid method of comparing the accomplishment quotients of individual pupils with those of the group.* *J. Appl. Psychol.*, 1934, 18, 272-281.—"Since the usual technique yields an expected accomplishment quotient too high for bright pupils and too low for those who are dull, the proposed method operates to make the expected AQ dependent upon the capacity and achievement of the group rather than of some theoretical norm. Thus bright pupils will be expected to have accomplishment quotients of less than 100, while dull pupils will be expected to have those of more than 100. The expected AQ may be computed from a regression line of IQ on AQ."—*R. S. Schultz* (Psychological Corporation).

5221. *Dexter, E. S., & Omwake, K. T.* *The relation between pitch discrimination and accent in modern languages.* *J. Appl. Psychol.*, 1934, 18, 267-271.—Teachers' ratings on accent in French correlate .485 with general intelligence test scores and .210 with scores on pitch discrimination (Seashore test). No relationship was found between tonal memory (Seashore test) and French accent. The



number of years of French studied correlates .225 with pitch discrimination. In general students rated low in pitch discrimination do not take more than two years of college French. There was a slight tendency for those rated low in accent to be rated frequently high in introversion and low in self-sufficiency on the Bernreuter personality inventory.—*R. S. Schultz* (Psychological Corporation).

5222. **Eckert, R. E.** Who is the superior student? *Univ. Buffalo Stud.*, 1934, 9, 11-50.—120 men students from the highest and lowest quarters of University of Buffalo students were studied for differences in measures available at college entrance. The superior students are younger. They more frequently select advanced courses in high school Latin and mathematics and less frequently sample social sciences at the secondary level. The New York State Regents average differentiates more sharply between the two groups than does the American Council Psychological Examination or the Iowa High School Content Examination. The superior students contain a larger proportion of immigrant parentage. The superior student rates himself as more introverted, ranking lower in social participation and remaining agitated after unkind remarks. He credits himself with the ability to read more rapidly, to write interestingly, and with clerical aptitude. The able student has less interest in athletics, but excels in leadership, especially in debate, publication staff, and student councils. In addition, the superior student has overcome greater handicaps than other students in his efforts to obtain a university education.—*M. E. Wagner* (Buffalo).

5223. **Eckert, R. E.** The problem of intellectual maturity. *Univ. Buffalo Stud.*, 1934, 9, 103-122.—An analysis of questionnaires returned by the University of Buffalo faculty indicates that members of this faculty differentiate in their thinking between intellectual maturity and brightness. The criteria of judgment are given. Selected "bright" and "intellectually mature" students showed reliable differences in their success in college English and social studies, New York State Regents average, total freshman-sophomore college average, and high school English, social studies and Latin. "Mature" students participate more frequently in extra-curricular activities.—*M. E. Wagner* (Buffalo).

5224. **Educ. Press Asso. of America.** Tenth yearbook. May, 1934. Pp. 32.—This account contains a classified list of educational periodicals, a list of the periodicals which are members of the Educational Press Association of America, a description of the thirty-ninth annual meeting at Cleveland, *Outstanding Needs of American Education* by J. E. Morgan, and a list of 60 educational books of 1933 recommended by the Educational Department of the Enoch Pratt Free Library in Baltimore.—*R. H. Brown* (Clark).

5225. **Entorf, M. L.** Mental hygiene problems in college. *Ind. Bull. Char. & Correct.*, 1934, No. 216, 32-37.—College curricula seldom offer courses that help the student to understand his own personality,

yet among the college group there is definitely a need for such work. Curricular additions, changes in faculty attitude toward students, and more formal clinical work are suggested as desirable.—*C. M. Loultit* (Indiana).

5226. **Eurich, A. C.** Retention of knowledge acquired in a course in general psychology. *J. Appl. Psychol.*, 1934, 18, 209-219.—The mean scores on new-type examinations 6 and 9 months after taking a course in general psychology are, respectively, 90 and 75% of the mean test score at the end of the course. "While relatively high correlations (.59 and .66) were obtained between scores on the final examination and the retests, no tendency is apparent for students who retain absolutely more psychology than others to retain also relatively more of the knowledge they possessed at the close of the course." Correlations ranging from .13 to .40 (intelligence constant) were obtained between test scores in general psychology and final marks in educational psychology. The result implies little justification for maintaining that general psychology is an absolute prerequisite for educational psychology.—*R. S. Schultz* (Psychological Corporation).

5227. **Finkenbinder, E. O.** An experiment to determine the influence of certain factors of learning during class period in college. *Proc. Iowa Acad. Sci.*, 1932, 39, 244.—Two sections of forty students each in psychology were equated on placement tests and a psychological content pre-test. The relative effectiveness of a long versus a short period of class discussion was studied. Each section was given an opportunity for both, in rotated order. The long period was less than 10% superior in gains to the shorter period; it was superior in certain types of questions.—*B. Wellman* (Iowa).

5228. **Hambrick, F. L.** A new plan for forming class groups. *Elem. School J.*, 1934, 34, 749-753.—The writer explains the procedure followed in setting up "a modified form of grouping" in grades 3-6, inclusive, of a Tulsa elementary platoon school. Pupils were first divided into two platoons on the basis of intelligence and reading test results. Several arithmetic, reading and spelling classes were then formed in each platoon according to the results of standardized or informal achievement tests. In all other subjects and school activities the criterion for the formation of class groups was chronological age. Since all classes in arithmetic, reading, and spelling, respectively, met at the same hour, a pupil might be readily transferred from one group to another. Frequent regrouping narrows the children's range of curricular achievement, provides flexibility, and facilitates learning.—*P. A. Witty* (Northwestern).

5229. **Hartmann, G. W.** Measuring teaching efficiency among college instructors. *Arch. of Psychol.*, 1933, No. 154. Pp. 45.—Three instructors of educational psychology, who taught classes of 55, 59, and 105 students respectively, cooperated to answer the question "Can teaching efficiency be measured?" Individuals in all groups were paired according to pre-test scores and the differences in

average gain under various teachers determined. The basic assumption behind the statistical comparison was that the most effective instructor was the one who was responsible for the greatest number of desirable changes in the pupils. Teaching ability apparently can be measured if one accepts the propriety of summing separate excellences with the result that a mean plane of instructional skill emerges. The best teacher will be the one with the highest level of success in producing an array of valuable personality modifications in the human beings under his influence. He can be identified with reasonable accuracy by means of an extensive test program wherever he is teaching a course which others are also teaching.—*E. M. Achilles* (Columbia).

5230. Henry, L. K. The relation of aptitude test data to fall quarter grades—998 cases—fall 1931. *Proc. Iowa Acad. Sci.*, 1932, 39, 227-230.—Results are presented on the application of the scholastic aptitude test given to entering students at Iowa State College, with particular reference to two tests on perception and linguistic ability. A close relation was obtained between quarter average and aptitude test score.—*B. Wellman* (Iowa).

5231. Hutchinson, M. E. Difficulty versus frequency of Latin words, forms, and constructions. *J. Exper. Educ.*, 1934, 2, 394-397.—Evidence is presented which indicates that frequency of occurrence is no sure determinant of whether a Latin word, form, or construction will be hard or easy for students of Latin.—*H. W. Karn* (Clark).

5232. Keller, H. Neuerscheinungen der Pädagogik. (New publications in pedagogy.) *Zsch. f. angew. Psychol.*, 1934, 46, 253-265.—A review of 24 articles and books on pedagogical problems.—*K. F. Muenzinger* (Colorado).

5233. Keys, N. The under-age student in the large university. *North. Calif. Yrbk. Educ. Excep. Child.*, 1933, 4, 17-28.—The purpose of this study was to determine the effects upon students of entering a large university at an age below the average. The author selected 430 students who had entered the University of California during the years between 1922 and 1931 at the age of 16½ years or less. These were compared as to scholarship, extra-curricular activities, post-graduate careers, and answers to a questionnaire relative to their own reactions to the university and post-university life with a similar group who entered at the normal age of 18 or over. The findings show that the younger group make a much better showing scholastically; they take part in more extra-curricular activities, and tend to pursue post-graduate and professional studies further than those entering the university two years older. The younger group rate themselves as satisfied with their experience as undergraduates from the standpoint of social adjustments.—*C. V. Hudgins* (Clarke School).

5234. Meriam, J. L. A critical survey of 1000 activities. *J. Exper. Educ.*, 1934, 2, 327-332.—Data secured from this survey lead the author to conclude that certain current practices in the formulation of

activity programs in public schools are in need of revision.—*H. W. Karn* (Clark).

5235. Mills, H. C. An evaluation of the three-year program leading to the baccalaureate degree. *Univ. Buffalo Stud.*, 1934, 9, 74-86.—The average scholarship of students completing their arts degree in three years is superior to that of the student body as a whole. These three-year students were largely attracted to the program by the financial saving involved. 19 of 32 students felt they had lost nothing by so shortening their college careers; 27 of 33 would attempt the shortened program again; 24 of 33 felt no handicapping of legitimate recreational activities; 28 would advise brilliant seniors to try the three-year program under conditions of health, general maturity, willingness to work, and proper use of the senior year at high school.—*M. E. Wagner* (Buffalo).

5236. Mills, H. C. Subject and activity load of high school juniors. *Univ. Buffalo Stud.*, 1934, 9, 87-102.—An analysis of questionnaires from 242 high school juniors of average or superior ability indicates that the large majority of such students have carried five units of high school subject matter, likewise that the large majority feel they could carry five units their senior year. Over four-fifths feel they are kept satisfactorily busy, while the amount of extra-curricular activities in which they are engaged and the average amount of time devoted to out-of-school study substantiate their claim that they are not overworked.—*M. E. Wagner* (Buffalo).

5237. Mills, H. C. Measuring overlapping between high school and college. *Univ. Buffalo Stud.*, 1934, 9, 211-302.—The direct method of measuring overlapping of course content in the two educational units is the use of grades on college examinations attained by superior high school students. This method was used to study course content overlap in college freshman and sophomore English, American history, foreign languages, trigonometry and college algebra, and introductory courses in physics, chemistry and economics. A study of the "contribution of high school physics to elementary college physics" indicates that those students contacting physics in high school have a decided advantage in this subject in college. The same is true of chemistry. The picture is less clear with regard to economics, in that a textbook analysis indicates an overlapping of content whereas grades made by student groups do not. "As the course in American history is now organized at the University of Buffalo, instructors are justified in assuming that their pupils have at their command as a result of their high school work relatively little more than an orientation in this field." A chapter devoted to "anticipating college work" describes the results of 190 college examinations written by high school students, 114 of which were successful (for which the examinee received college credit). Examinations were taken successfully in accounting, introductory chemistry, economics, physics, European and American history, psychology, trigonometry and college algebra, both freshman and sophomore English, and several levels of French and German.—*M. E. Wagner* (Buffalo).

5238. Newburn, H. K. The relative effect of two methods of vocabulary drill on achievement in American history. *Doctoral Theses Educ. II, Univ. Iowa Stud.: Stud. Educ.*, 1934, 9, No. 3, 9-30.—Two experimental groups of 357 and 344 pupils were given some daily drill in technical vocabulary of American history, the remainder of the period being devoted to general achievement procedures. A control group of 235 pupils, equated with the others on general achievement and vocabulary, devoted the entire period to general achievement. At the end of the experiment the control group was superior in history achievement and the experimental groups in vocabulary.—B. Wellman (Iowa).

5239. Nilson, K. Special classes for physically and mentally handicapped pupils. *School & Soc.*, 1934, 39, 821-824.—The author gives a history and description of the program for handicapped pupils in Minnesota.—H. L. Koch (Chicago).

5240. Ojemann, R. H. The reading ability of parents and factors associated with reading difficulty of parent education materials. *Univ. Iowa Stud.: Stud. Child Welfare*, 1934, 8, 9-32; 249-272.—The distribution of reading ability of adults was studied by means of a comprehension test constructed from representative parent education materials and administered to 209 parents attending study groups. The reliability of the test was .96. All but three out of sixteen selections of 500 words each taken at random from parent education materials required a greater reading ability than that of average subjects who have not continued their education beyond the eighth grade. The factors most closely associated with reading difficulty and the characteristics of materials at the various levels of difficulty were analyzed.—B. Wellman (Iowa).

5241. Patterson, H. The chronological age of highly intelligent freshmen. *Proc. Okla. Acad. Sci.*, 1934, 14, 81-82.—Over a ten-year period, 1923 to 1933, education freshmen in Oklahoma A. & M. College were distributed as follows as to age and IQ (Otis SA):

	High IQ 110-131	Low IQ 70-89	Average IQ 90-109	Total 70-131
Total cases	301	126	853	1280
Average age	18.6	19.6	19	18.9
Average IQ	115	85	100	102

The negative correlation coefficients between chronological age and IQ were negligible for all four groups.—M. O. Wilson (Oklahoma).

5242. Peik, W. E., & Rugg, E. U. The group reactions of over 1300 college, university, and teachers college instructors to 63 curriculum proposals related to the education of teachers. *J. Exper. Educ.*, 1934, 2, 317-326.—The following curricular provisions were found to be most strongly favored by all the groups of teachers questioned in this investigation: (1) emphasis upon both cultural and technical training for teaching; (2) provision of orientation courses; (3) the inclusion of electives in curricula; (4) provision for practice teaching; (5) frequent opportunity for prospective teachers to observe good instruction in

the practice school; (6) preparation of secondary teachers in several teaching fields; (7) provision for the development of latent abilities; (8) emphasis upon the creative aspects of higher education for teachers; (9) differentiation in training for specific levels or subjects; (10) importance of subject matter mastery; (11) limited acceptance of correspondence and extension work at the undergraduate level and their non-acceptance at the graduate level; (12) limitation of teaching certificates to specific levels and subjects; (13) thorough study of personnel data of prospective teachers; (14) balanced curricula which develop physical, social and esthetic as well as intellectual capacities; (15) preparation in contemporary life problems; (16) development of traits as well as subject matter; (17) requirement of health certificate; (18) leadership of training institutions in the reorganization of public school curricula; (19) not all higher institutions to prepare teachers.—H. W. Karn (Clark).

5243. Perpignan, J. E. The Philippine Islands in American school textbooks. *J. Exper. Educ.*, 1934, 2, 366-393.—H. W. Karn (Clark).

5244. Reichwage-Huth, —. *Erziehung zu Einfachheit und Mut.* (Education for simplicity and courage.) *Kleine Kinder*, 1934, No. 5.—The writer shows how wrong parents are who believe that it is their duty to keep their children away from all danger and to protect them continuously. The child can attain courage and self-confidence only when it has always the possibility of trying out its powers.—E. Eickenkel (Leipzig).

5245. Richards, E. L. Basic factors in child-teacher relationships. (Child Welfare Pamphlets No. 33.) *Bull. State Univ. Iowa*, 1934, N. S. No. 750. Pp. 16.—Particular importance is attached to the basic training of teachers and the formation of good habit patterns in children as objectives in education and child welfare. The dangers inherent in unrestrained individualism are pointed out.—B. Wellman (Iowa).

5246. Sarbaugh, M. E. The young college student. *Univ. Buffalo Stud.*, 1934, 9, Chap. 5.—57 students (32 men and 25 women) entering college at 16 years of age or less were matched with the same number of students averaging two years older on high school Regents average, school fifth of graduating class, and American Council Psychological Examination. The college freshmen and individual subject averages for the two groups were practically identical. However, except in mathematics and the physical sciences, the control group is more variable in its performance than the accelerated students. The latter group more frequently complete the arts course. The proportions of the two groups receiving distinction at college graduation is practically identical. The accelerated group report more frequent "subjective" difficulties in college. More of this group found no extra-curricular activities interesting; also, more reported many activities interesting. The young group achieved its acceleration almost entirely by "skipping" grades in grammar school and by carrying many subjects each year in high school. In elementary school,



21% of the young and 42% of the control group report no "skipping"; 26% of the young and 3% of the control group report "skipping" two or more grades; 36% of the young and 6% of the control group completed high school in three years or less. Less than 3% of the young group report intellectual handicap due to youth in either the grades or high school; 5% felt intellectually handicapped in college. In the grades 10%, in high school 46%, and in college 32% felt social handicap due to youth.—H. J. P. Schubert (Transient Bureau, Buffalo).

5247. Sarbaugh, M. E. The effect of repetition of high school courses on college success. *Univ. Buffalo Stud.*, 1934, 9, 174-183.—380 college students were divided into the following groups: those who had not repeated any high school examinations, those who repeated to raise passing grades (to compete for scholarships), and those who repeated one, two, and three or more previously failed subjects. Those who repeated grades to raise an earlier passing mark were superior on freshman-sophomore college average, the American Council Psychological Examination, and the high school Regents average; second came those who repeated no examinations; and finally, in order mentioned, those who repeated one, two, and three or more previously failed subjects. The correlation coefficient between Regents average and college average was much closer (.71) for those who repeated to raise grades, next (.62) for those who did not repeat, and lowest for the repeaters of one, two, and three or more failed subjects (.54, .48, and .35 respectively). An attempt is made to match students (25 cases each) from the five groups on age, psychological examination, and Regents average. The group who repeated to raise grades were incomparably superior in college. Comparisons of the remaining groups show a slight superiority for those who did not repeat and for those who repeated three or more courses. When 40 cases from the "repeat to raise passing grades" group were paired with 40 who had repeated no subject, the former were superior in college. Elementary and intermediate algebra, geometry, and Latin II and III were most frequently repeated.—H. J. P. Schubert (Transient Bureau, Buffalo).

5248. Schultz, J. P., & Harap, H. A functional course in chemistry. *J. Exper. Educ.*, 1934, 2, 333-338.—H. W. Karn (Clark).

5249. Stalnaker, J. M., & Richardson, M. W. Scholarship examinations. *J. Higher Educ.*, 1934, 5, 305-313.—The author discusses the general nature and function of the scholarship examination, stating that "the fundamental purpose of a scholarship examination is to select the most promising students." In fairness to the students the more reliable objective-test form should be used to the exclusion of the essay form, since no evidence has been presented to show that the organization, originality, and imagination displayed in the essay form can be reliably judged by the essay readers. In fairness to the student, also, the general nature of the test should be announced so that the student may select the subjects in which

he feels himself most competent. The distribution of difficulty of items has in the past been left largely to chance, but in order to obtain the most significant selection at the upper end of the distribution it is essential that the test be "properly loaded with difficult items." Six different kinds of content are suggested: (1) that based on previous courses in the field; (2) general information about the field; (3) advanced knowledge of the field beyond the information and skills required in the courses; (4) items attempting to get at reasoning power within the field; also integrating and summarizing questions; (5) typical intelligence-test items based on content taken from the given field; and (6) so-called trick questions. Illustrations of each type of question, taken from the University of Chicago scholarship examination, are presented. The validity of these tests will be determined by the subsequent success of the contestants, and the author states that "studies, as yet unpublished, show that students selected on the basis of the competitive scholarship examinations are the most successful group of students at the University of Chicago."—R. A. Brotemarkle (Pennsylvania).

5250. Steiner, M. A. Value of home-study assignments. *School & Soc.*, 1934, 40, 20-24.—The purpose of the investigation was to discover the effect of home-study assignments upon the standard test scores in arithmetic and English of seventh-grade pupils. Half of a class of 39 junior high school students were for a semester given home assignments in English; while the other half, selected carefully so as to serve as a group equivalent to the former, were given instead home assignments in arithmetic. The home work contained only drill material not touched upon in class. Papers were collected daily and returned with comments to the student. All pupils took the same monthly and term tests. The differences between the average gains of the two groups in performance on standard achievement tests in arithmetic favored the pupils who had the home work, and in 3 of the 4 tests the gains of the latter exceeded those specified as normal for the first half of the seventh grade. No significant group differences were noted, however, in the number failing the course or in performance on the objective test prepared by the teacher to cover the class material. In the case of English the results were not consistently favorable to the home-work group. In the grammar test only was the latter significantly superior.—H. L. Koch (Chicago).

5251. Terry, P. W. The prognostic value of different types of tests in courses in educational psychology. *J. Appl. Psychol.*, 1934, 18, 231-240.—Scores on the Van Wagenen Reading Scale in Educational Psychology, Iowa Silent Reading Test (advanced form), and the Otis Group Intelligence Test (advanced examination) correlate, respectively, .72, .63, and .69 with achievement on an objective and essay examination in educational psychology. When the Otis test is combined with either of the reading tests the correlation increases slightly. For practical purposes either the Van Wagenen Reading Scale or the Otis test shows a significant positive relationship

to scores in the course examination in educational psychology.—*R. S. Schultz* (Psychological Corporation).

5252. **Traill, M. J., & Harap, H.** Art preferences in junior high school. A guide to art objectives. *J. Exper. Educ.*, 1934, 2, 355-365.—Pupils in three schools from typical sections of Cleveland and Lakewood, Ohio, were questioned regarding their art interests. The blank form used for this purpose was divided into four columns: process, subject, medium and product, each followed by an explanatory phrase. The forms were returned by 697 pupils. An analysis of the data leads the author to conclude "that tastes differ among pupils, and therefore that a course is most successful which allows for the widest latitude in the choice of product, process, medium and subject."—*H. W. Karn* (Clark).

5253. **Wagner, M. E.** Prediction of college success. *Univ. Buffalo Stud.*, 1934, 9, 125-144.—138 items of information collected on 822 University of Buffalo students were inter-related. Among these were total "academic" New York State Regents average, high school fifth of graduating class, American Council Psychological and Iowa High School Content Examinations, individual Regents subject and college course grades, high school language averages, sex, age at high school graduation, number of high school units of credit, graduating high school, and the college freshman-sophomore average. The best predictive measure for this two-year college average was found to be the Regents average. For large city schools the rank in graduating class was also valuable. All high school language grades were comparatively very predictive of future college success. Next were the Regents grades in English and the social sciences. Regents mathematics grades were least predictive. Relationships, in most cases, were better for girls than for boys. The most predictive test of those studied was the Iowa Content Examination, but this was inferior to the Regents average, to rank in graduating class, and to language high school grades. No significant increase in  $r$  between Regents average and college success resulted by statistically combining with this Regents average other available measures. Dividing a total student body into more homogeneous groups, e.g. by graduating school or sex or age, and then developing prediction formulae is found more fruitful. The gross score resulting from the Cooperative College Sophomore Testing Program is as closely related to the total Regents average as is the two-year college average grade. This gross score is more closely related to the Regents average than to either the college freshman or sophomore average.—*H. J. P. Schubert* (Transient Bureau, Buffalo).

5254. **Wagner, M. E.** Prediction of specific college field and course performance. *Univ. Buffalo Stud.*, 1934, 9, 145-173.—The total "academic" New York State Regents average, individual Regents subject grades, school rank in graduating class, the American Council Psychological and Iowa High School Content Examination total and sub-test scores, age at high

school graduation, and sex were related to college two-year averages and to individual college course grades in mathematics, foreign languages (ancient and modern), English, social and physical sciences. The measure generally most predictive was the Regents average. The order of ease of prediction for the various fields was ancient and modern foreign languages, English, the social sciences, the physical sciences, and last mathematics. Latin III Regents (Cicero) grades were comparatively very predictive in all fields of college work. Regents scores within a particular field, especially the more advanced examinations, were comparatively quite predictive within the same field of college study. Such short-item objective examinations as were investigated were not superior in predictive value to the Regents measures.—*H. J. P. Schubert* (Transient Bureau, Buffalo).

5255. **Wagner, M. E.** Generalizations regarding prediction at the University of Buffalo, with broader implications. *Univ. Buffalo Stud.*, 1934, 9, 184-193.—A comparison of the predictive value of the New York State Regents average, the American Council on Education Psychological Examination, and the Iowa High School Content Examination, together with a review of the prediction studies appearing in this volume.—*H. J. P. Schubert* (Transient Bureau, Buffalo).

5256. **Wagner, M. E.** A survey of the literature on college performance prediction. *Univ. Buffalo Stud.*, 1934, 9, 194-209.—A review of correlation coefficients between various measures of college performance and (1) high school averages, (2) intelligence tests including the Army Alpha, the Terman, the Otis, the College Entrance Board Aptitude, the Ohio State University, the Thorndike, and the American Council Psychological Examination which indicates that the high school average, in general, is superior in its predictive value for college success to the intelligence tests. The median  $r$  between college success and high school average is .56; between this criterion and a combination of measures, the median  $R$  is .67. Between success in college English and various measures the median  $r$  is .42; between college mathematics and various measures, the median  $r$  is .38; between college languages and other measures, .43 is the median coefficient; and between college social sciences and physical sciences the medians are respectively .63 and .47. A bibliography of 91 titles is appended.—*H. J. P. Schubert* (Transient Bureau, Buffalo).

5257. **Wiecking, A. M.** The relative effectiveness of various forms of presentation of dental hygiene reading matter as shown by tests of reading comprehension. *Doctoral Theses Educ. II. Univ. Iowa Stud.; Stud. Educ.*, 1934, 9, No. 3, 91-122.—The relative effectiveness of various forms of presentation of dental hygiene reading matter as shown by reading comprehension of fourth-grade children was investigated. Case study, straight exposition, factual story, personification story and tabloid were compared. Approximately 1500 fourth-grade children were given pre-tests, after-tests immediately following

reading, and recall tests one month later. The five forms of presentation were of equal effectiveness. Each group made significant gains.—*B. Wellman* (Iowa).

5258. Wise, C. T. Selection and gradation of words in spelling. *Elem. School J.*, 1934, 34, 754-766.—This investigation sought to determine, by a detailed study of 20 "modern" spellers, agreement of the books in: (1) the words chosen; (2) the grade placement of the words; and (3) the methods of presentation. Analysis of the 20 vocabularies revealed a total of 208,771 words, of which 13,641 were different. Common to 11 or more spellers were 3,630 words; these "approximate the number of words that a child will ordinarily need to spell for writing purposes." The Commonwealth List and Breed's list contain, respectively, all but 153 and 92 of these words. The grade placement of words shows great variability; maximum agreement is found in grades 1, 2, 7, and 8.—*P. A. Witly* (Northwestern).

[See also abstracts 4872, 4873, 4879, 4913, 4917, 5090, 5094, 5125, 5147, 5195, 5201, 5208, 5303, 5322.]

#### BIOMETRY AND STATISTICS

5259. Bruen, C. Five-variable straight line diagram. *Metron*, 1933, 11, 137-150.—*R. R. Willoughby* (Clark).

5260. Castellano, V. Sulle relazioni tra curve di frequenza e curve di concentrazione e sui rapporti di concentrazione corrispondenti a determinate distribuzioni. (On the relations between curves of frequency and curves of concentration, and their relations of concentration corresponding to determinate distributions.) *Metron*, 1933, 10, 3-60.—*R. R. Willoughby* (Clark).

5261. Garnett, M. The single general factor: a note on linear transformations of hierarchical systems. *Brit. J. Psychol.*, 1934, 25, 100-105.—Shows that there is "an infinitely small chance that a linear transformation, made at random, of a hierarchical system would itself be hierarchical; that it is nevertheless possible to design linear transformations of a hierarchical system so as to produce hierarchical systems; and that it is even possible, but only by using some negative weights (or else a large majority of zero weights), to design linear transformations of a hierarchical system so as to conserve *g*."—*M. D. Vernon* (Cambridge, England).

5262. Griaznov, M. P. Graficheskii metod vychislenia normalnoi krivoi variatsionnogo riada. (The graphic method of calculation of a normal curve of the variation series.) *Antrop. zh.*, 1933, 1-2, 193-200.—The author proposes a simplified method with the aid of auxiliary tables for the construction of a theoretical curve. This is done by means of determining points which are separated from the mode by equal distances which correspond to fractional parts of the sigma, whereby the sigma is not reduced to a class interval.—*B. N. Vishnevski* (Leningrad).

5263. Irwin, J. O. Correlation methods in psychology. *Brit. J. Psychol.*, 1934, 25, 86-91.—The limitations of correlation coefficients are discussed for determining which of several variables is most closely associated with a given variable, when the variables under consideration are qualitative, or classified in broad categories. Alternative measures of association are suggested, such as those used by Farmer, Chambers and Kirk with their *Tests of Accident Proneness*.—*M. D. Vernon* (Cambridge, England).

5264. Merzrath, E. Anpassung von Flächen an zweidimensionale Kollektivgegenstände und ihre Auswertung für die Korrelationstheorie. (The adjustment of surfaces to two-dimensional populations and its evaluation for correlation theory.) *Metron*, 1933, 11, 103-137.—*R. R. Willoughby* (Clark).

5265. Thomson, G. H. The meaning of 'i' in the estimate of 'g.' *Brit. J. Psychol.*, 1934, 25, 92-99.—Methods are given for calculating *i*, the indeterminateness of *g*, and its dependence upon *S*, the sum of the specific abilities. It is also pointed out that *i* may signify either the indefiniteness of the existence of *g*, or inexactness in measuring it.—*M. D. Vernon* (Cambridge, England).

[See also abstract 5096.]

#### MENTAL TESTS

5266. Bachelard, P. M. An experiment with the Crichton test. *Australas. J. Psychol. & Philos.*, 1934, 12, 143-149.—The Crichton test "for the more intelligent adolescents and adults" was administered in a slightly modified version to 47 students at Melbourne. About half were arts students, and about half were women. On comparing sexes and courses it was found that on the average women scored higher than men, that men but not women in the science course were poor in the literary section of the test, but that science students of both sexes excelled in the arithmetical section. It is concluded that the test "seems weighted in favour of science students."—*H. D. Spoerl* (Boston).

5267. Cattell, R. B. Occupational norms of intelligence, and the standardization of an adult intelligence test. *Brit. J. Psychol.*, 1934, 25, 1-28.—The norms for a verbal group intelligence test (Scale III, Form A, Cattell Intelligence Tests) were calculated from the scores of groups of children aged 8 to 15, and were extrapolated for higher mental ages. The score distributions on this test were obtained for a large number of adults selected from all classes of the general population; and the averages and interquartile ranges of IQ were calculated for each of 178 occupations from unskilled to professional.—*M. D. Vernon* (Cambridge, England).

5268. Fenton, N., & Wallace, R. Use of tests in twenty-eight child guidance clinic centers in the United States. *J. Juven. Res.*, 1934, 18, 115-118.—The study summarizes the returns from a questionnaire sent to 28 child guidance clinics in the United States. Of the intelligence tests the Stanford-Binet



was most frequently reported as used; of the personality tests or schedules, the Bernreuter; of the vocational guidance tests, the O'Connor Wiggly Block; and of the tests of special abilities, the Stenquist Mechanical Ability and the Stanford Achievement.—*H. L. Koch* (Chicago).

5269. **Horst, P.** The economical collection of data for test validation. *J. Exper. Educ.*, 1934, 3, 250-253.—A description of some statistical time-saving techniques developed and used by the author in securing data for test validation. In the present article the techniques are employed in connection with a specific set of problems arising from the development of a test for the selection of salesmen in a large industrial concern.—*H. W. Karn* (Clark).

5270. **Pear, T. H.** Are linguistic tests adequate? *Brit. J. Psychol.*, 1934, 25, 55-62.—In certain occupations which involve close social contacts, the ability to speak well is very important, and there should be adequate means of testing it. But the existent linguistic tests make insufficient distinction between the various modes of using language, e.g. in speaking, writing and understanding written and spoken language. Moreover, these uses may differ in different situations and occupations.—*M. D. Vernon* (Cambridge, England).

5271. **Syrkin, M.** Formule de correction pour les tests électifs et nature des erreurs dans ces tests. (Formula for correcting alternative-answer tests and nature of errors in these tests.) *Trav. humain*, 1934, 2, 145-156.—Wrong responses are not uniformly distributed through the alternatives, hence are not due entirely to chance. In the analogies test the subjects appear to select the alternative that is most closely associated with the third word of the analogy when they do not get the correct answer. Explanations of most frequent wrong responses in other types of tests are varied. The correction formula consequently is discarded. Its apparent increase of the test reliability is due to errors in constructing the test whereby the correct response may be achieved by an erroneous method.—*H. E. Burt* (Ohio State).

5272. **Tinker, M. A.** Speed in intelligence. *J. Appl. Psychol.*, 1934, 18, 189-196.—Previous experimental results on the relation of speed to intelligence have many limitations. A more accurate picture of this relationship would be obtained "by measuring speed and level of ability on exactly the same test and correlating the two scores."—*R. S. Schultz* (Psychological Corporation).

5273. **Traxler, A. E.** Reliability, constancy and validity of the Otis IQ. *J. Appl. Psychol.*, 1934, 18, 241-251.—The average reliability coefficient of the IQ based on forms of the Otis Self-Administering Test administered to high school students at least one year apart is .725. The Otis IQ is found to be fairly constant and the median variation from one form to another is 5.1 points. The mean coefficient of correlation between Otis IQ and Binet IQ is .718 and when corrected for attenuation it is .967. In general the Otis IQ is thought to be as dependable

as the Binet IQ.—*R. S. Schultz* (Psychological Corporation).

[See also abstracts 5265, 5325.]

## CHILDHOOD AND ADOLESCENCE

5274. **Ackerly, S.** Environmental influences that help or hinder the child. *Ind. Bull. Char. & Correct.*, 1934, No. 216, 27-32.—"An environment that offers a child a variety of avenues through which he can express himself when directed by his own needs—physical, mental, and affectional—is the need of every child. If discouragement can be warded off, it is amazing what adjustments time brings about."—*C. M. Louttit* (Indiana).

5275. [Anon.] The reading of a gifted child in his sixth and seventh years. *J. Juv. Res.*, 1934, 18, 107-111.—A list with comments, by the subject's father.—*H. L. Koch* (Chicago).

5276. [Anon.] Child welfare. *Russell Sage Found. Lib. Bull.*, 1934, No. 125. Pp. 5. \$.10.—A select list of recent references, 1931-date.—*R. R. Willoughby* (Clark).

5277. **Baer, —.** Vom kindlichen Bewegungsdrang. (The drive to activity in the child.) *Kleine Kinder*, 1934, No. 5.—Small children cannot sit quietly for long periods of time. The strong drive to activity in children forms the biological-physiological basis for their mental and bodily growth.—*E. Eickenel* (Leipzig).

5278. **Berne, E. Van C., & Kelly, H. G.** The adequacy of samples of behavior obtained during short observation periods. *Univ. Iowa Stud.; Stud. Child Welfare*, 1934, 9, No. 3, 113-125.—From ten hours of observation over a period of seven weeks for each of five children on sociability, cooperation and interest, the authors point out the instability of these behavior traits and the necessity of a very careful analysis of the trend of each trait before it can be claimed that a measure is adequate to show individual differences. An analysis of the continuous curve of the behavior trait to discover a short period that gives a score which is fairly constant or representative of a longer period is considered necessary.—*B. Wellman* (Iowa).

5279. **Conrad, H. S.** A statistical study of ratings on the California Behavior Inventory for nursery-school children. *Genet. Psychol. Monog.*, 1934, 16, 1-78.—Three nursery-school teachers rated 12 boys (aged about 42 months) and 18 girls (aged about 41 months) on the 231 traits of the California Behavior Inventory. From one to two months later the same three teachers re-rated these children on 31 chosen items of the Inventory. Results are treated so as to bring out the following points: degree of confidence with which a teacher rated; significance on child's total pattern of individual items of inventory; consistency of ratings, or self-agreement (in relation to trait being rated, the child being rated, confidence of rating, and estimated significance of trait). The consistency of the confidence ratings and the consistency of the ratings of significance of specific items

are also considered. Inter-judge agreement in trait ratings is presented. A bibliography of 7 titles, dealing mostly with the statistics involved in the study, is appended.—*F. M. Teagarden* (Pittsburgh).

5280. Cowan, E. A., & Pratt, B. M. The hurdle jump as a developmental and diagnostic test of motor coordination for children from three to twelve years of age. *Child Development*, 1934, 5, 107-121.—Apparatus, procedure, and norms are described for the use of a standard hurdle jump as a test of gross motor coordination in children aged three to twelve years inclusive. Suggestions are made for the clinical application of the test.—*F. D. McTeer* (Wayne University, Detroit).

5281. Dawe, H. C. An analysis of two hundred quarrels of preschool children. *Child Development*, 1934, 5, 139-157.—Detailed observations of 200 quarrels as they took place during the relatively uncontrolled social environment of the nursery-school free-play period indicate that the majority of quarrels between nursery school children begin as struggles for possessions; the most frequent motor activities are pushing, striking, and pulling; verbal activities, when they do occur, are usually crying, forbidding, and commanding. After an average duration of 23 seconds the quarrel is settled in the majority of cases by one child's forcing the other to yield. Boys quarrel more frequently; younger children start more quarrels; but older children quarrel more aggressively.—*F. D. McTeer* (Wayne University, Detroit).

5282. Decroly, O. Comment l'enfant arrive à parler. (How the child comes to speak.) *Cent. du P. E. S. de Belgique*. 2 vols. Pp. 306.—This synthetic study was published after the death of its author from his revised notes, which were completed by J. Decroly and J. E. Segers. It is the fruit of his "bibliographical" researches, together with his own observations and personal remarks. In the first volume, after an introduction on the various forms of language and its relations to intelligence and feelings, he discusses the development of spoken language, examining the preparatory stages and the various phases of comprehension, imitation, and expression. The second volume takes up the development of vocabulary, the different categories of words, the different types of word deformation, the factors influencing the development of language, and the language of twins, and ends with a bibliography of 162 titles.—*R. Nihard* (Liège).

5283. Dell, F. Children and the machine age. (Child Welfare Pamphlets No. 35.) *Bull. State Univ. Iowa*, 1934, N. S. No. 752. Pp. 11.—Machinery has set us free from the tyranny of the landed-property system, but we have retained from this system many institutions, ideas, ideals, theories and practices which do not fit well into our machine age. Among them is education. We now want education for life. The family is losing its authority; we are now trying to build up a family based upon love rather than upon property responsibility. The author advocates education to replace dependence upon parental authority with independence, self-determination and self-

reliance; coeducation; emotional maturing; and subsidizing of marriage.—*B. Wellman* (Iowa).

5284. Dillon, M. S. Attitudes of children toward their own bodies and those of other children. *Child Development*, 1934, 5, 165-176.—Two groups of nursery-school children, 38 children in all, ranging in age from 27 to 62 months, were observed on 21 consecutive days during the dressing period either before or after their afternoon nap. A descriptive account is presented of the frequency and nature of the following types of behavior: manipulation of the genitals; interest in parts of the body other than the genitals; interest in the facts of sex differentiation; and use of tabooed language. The children in the older group, over 3½ years, have a more definite awareness and interest in their bodies than do those of the younger group; although in neither group is there any sense of impropriety in appearing undressed before either adults or other children.—*F. D. McTeer* (Wayne University, Detroit).

5285. Dimock, H. S. The modern child and religion. *Child Welfare Pamph.*, No. 32. *Bull. State Univ. Iowa*, 1934, N. S. No. 749. Pp. 11.—Early emotional conditioning is shown to have an effect on the tenor of religious development. Parents and educators are warned of the danger of imposing adult religious concepts on children and of using theological concepts as controls of conduct. Development of religious behavior can take place only through the practice of religious behavior.—*B. Wellman* (Iowa).

5286. Dodd, F. H. Common-sense psychology and the home. London: Allen & Unwin, 1933. Pp. 185. 50/-.—Psychological advice to parents on the bringing up of children.—*F. C. Bartlett* (Cambridge, England).

5287. Efimov, M. E. Dannye o fizicheskom razvitii chuvashskikh detei i podrostkov. (Data concerning the physical development of Chuvash children and adolescents.) *Antrop. zh.*, 1933, 1-2, 120-131.—Height, weight and other characteristics of body development are greater in girls in the transition period than in boys. This justifies the assertion that in girls the transitional period begins at 13 years and the development is slowed up. In youths sexual maturity appears at  $16 \pm 1.3$  years and terminates at  $18.7 \pm 1.3$  years. In girls this process begins on the average at  $15.4 \pm 1.3$  and ends with  $17.5 \pm 1.5$  years. Judging from the axillary hair development the first menses appear at  $16 \pm 1.5$  years, i.e., between 14.5 and 17.5 years. Sexual maturity appears in girls 0.6 years earlier than in boys.—*B. N. Vishnevsky* (Leningrad).

5288. Ellesor, M. V. The relation between situation and response in the vocalization of a three-year-old child. *Child Development*, 1934, 5, 158-164.—The vocalizations of one three-year-old child were studied in five familiar free-play situations, home, sand pile, bath, nursery school with other children, and nursery school alone; and also in four situations which might be expected to restrain the use of language, riding in an automobile, listening to music, eating an ice-cream cone, and at a movie. Ten fifteen-minute records

were taken in each situation. The number of vocalizations do not differ significantly between any two play situations, but the constrained situations did greatly reduce the amount of vocalization, especially in the two latter. The sort of verbal responses varied markedly from one free-play situation to another.—*F. D. McTeer* (Wayne University, Detroit).

5289. **Fauville, A.** *Étude de deux enfants bien doués.* (A study of two gifted children.) *Nova et vetera*, 1934, 16, 182-193.—The first of the two cases is the more interesting: the boy, examined on two occasions by means of the Stanford-Binet scale, obtained IQ's of 146 and 159. However, he did not have good scholastic reports, the probable reason being a lack of application due to his small interest in his school tasks, which were too easy for him.—*R. Nihard* (Liège).

5290. **Ferrière, A.** *Die sittliche Erziehung des Säuglings.* (The moral education of the infant.) *Kleine Kinder*, 1934, No. 5.—The moral education of the child should begin even in the cradle, because at this time the formation of habits begins. A very important factor in the formation of habits is regularity.—*E. Eickenel* (Leipzig).

5291. **Fillmore, E. A.** *Reading materials for parents in Iowa libraries.* *Univ. Iowa Stud.: Stud. Child Welfare*, 1934, 8, 147-178; 291-322.—The reading materials offered to parents in 41 selected Iowa libraries were checked against a previously prepared bibliography. Books, magazines and pamphlets were included. Information was obtained on the number of books in the libraries, kinds, frequency of appearance, selection and availability.—*B. Wellman* (Iowa).

5292. **Fleming, R. M.** *A study of growth and development.* *Med. Res. Council, Spec. Rep. Ser.*, 1933, No. 190. Pp. 85.—This is an investigation of the actual course of growth in individual cases through the successive annual observation of the same children. The data include stature, head length and breadth, facial and radial measurements, eye and hair color, and statements of preferences and dislikes. A general statistical analysis of these data is based on 14 age groups for 2,219 boys and 2,073 girls, a majority of whom were of Welsh stock. In his general discussion the author includes sections on the factors affecting the rhythm of growth, and sex differences and physical or racial types.—*R. Smith* (Clark).

5293. **Francis, K. V., & Fillmore, E. A.** *The influence of environment upon the personality of children.* *Univ. Iowa Stud.: Stud. Child Welfare*, 1934, 9, No. 2. Pp. 71.—Children in two city areas economically and socially different were studied in an attempt to discover the patterns or processes influencing the development of integrated personalities. 112 children, representing 60 families, half in each area, were included. The personality adjustment of the children in the two areas did not differ significantly. Physical environment by itself was shown to be of comparatively little importance, whereas a number of the parent attitudes appeared to be significantly influential. Thus the factors originally

thought to be important, namely, poor economic conditions, broken homes, foreign-born parents and physical sickness, had little effect on their own account. The influence of social environment seemed to be felt through the channel of parent attitudes rather than directly. Emotional swings appeared to be handed on from generation to generation.—*B. Wellman* (Iowa).

5294. **Fuchs, H. Franzi.** *Amer. J. Orthopsychiat.*, 1934, 4, 233-248.—The case study of a child of kindergarten age in a special class for difficult children. Psychoanalytic methods are adapted for use in interpreting the child's situation to him.—*H. Peak* (Randolph-Macon).

5295. **Glover, K., & Dewey, E.** *Children of the new day.* New York: Appleton-Century, 1934. Pp. 332. \$2.25.—The authors examine the sociological and economic origins of the American child and the causes of present changes creating a new challenge to parenthood. A description of the stages of biological growth and an analysis of emotional development are given in the interests of a plea for the recognition of individual differences and a warning against standards and averages to which children have been expected to conform. Food and dietary requirements are discussed, followed by a consideration of the mechanisms of habit formation. The family is not disintegrating but undergoing a transition in which the intangible values of home life are overlooked. In comparing the old with the new type of school, the authors survey the factors motivating present-day life and education. More coordination and simplification in education are needed, and encouraging the play motive would help correct the abuses of the radio. Social rebels result from the thwarted needs for security and development: the responsibility for the development of these rests primarily with the home. The hope is expressed for a reevaluation of spiritual values. At the end of each chapter copious extracts from the reports of various committees of the White House Conference supplement the topics presented.—*P. S. de Q. Cabot* (Harvard).

5296. **Gruenberg, S. M.** *Your child today and tomorrow; some practical counsel for parents.* (4th rev. ed.) New York: Blue Ribbon Books, 1934. Pp. 255. \$1.00.—*R. R. Willoughby* (Clark).

5297. **Gunn, M. A.** *A technique for improving basic skills in English in high school.* *Univ. Iowa Stud.: Stud. Educ.*, 1934, 8, No. 7. Pp. 40.—The improvement in basic skills in English was studied by means of an initial and end test of dictation, reading, vocabulary, and silent reading, with an intervening skill-building program. All children enrolled in English from the seventh to twelfth grades in one high school were included. There was a marked increase in ability in every grade.—*B. Wellman* (Iowa).

5298. **Hanson, R. L.** *A study of children's use of money.* *Univ. Iowa Stud.: Stud. Child Welfare*, 1934, 8, 219-247; 333-335.—By an analytic study of paired cases and of observations in the literature, it was



aimed to determine what experiences are necessary to develop in children the concept of the place of money in the social system. It was also aimed to determine to what extent a specified group of parents was supplying their children with opportunities to engage in these experiences. A preliminary survey was made of 202 children in grades 5 through 12. 90 children who had some money of their own which they managed were selected for further interviews. A scheme for scoring the opportunities provided by parents was applied to these 90 cases.—*B. Wellman* (Iowa).

5299. Hattendorf, K. W. Parents' answers to children's sex questions. *Child Welfare Pamph.*, No. 30. *Bull. State Univ. Iowa*, 1933, n. s. No. 710. Pp. 15.—This pamphlet consists mainly of illustrations of the questions concerning sex children have asked and the answers given by their mothers. The questions were selected from 1,763 questions asked by children two to fourteen years of age.—*B. Wellman* (Iowa).

5300. Hattwick, M. S. A preliminary study of pitch inflection in the speech of preschool children. *Proc. Iowa Acad. Sci.*, 1932, 39, 237-242.—The general pitch level and the range of variability or flexibility in individual children was ascertained through observations of the expressive use of language by preschool children. Pitch level varied with situations, being lowest when children were talking to themselves and highest when they were shouting. Individual differences in variability of pitch were more outstanding than differences in the mean pitch level. It was suggested that an illusion of pitch difference may be introduced in ordinary perception by qualitative differences in voices.—*B. Wellman* (Iowa).

5301. Haubold, M. *Bildbetrachtungen durch Kinder und Jugendliche (Versuche über das Unterscheiden von Bildern verschiedenen Stiles)*. (Appreciation of pictures by children and adolescents. Experiments on the discrimination of different styles of pictures.) *Neue Psychol. Stud.*, 1933, 7, No. 2. RM. 6.50.—Photographs of original works of art of different masters but with the same content (religious subjects, subjects from fairy tales) were presented side by side on an easel. The subjects had the task of selecting those pictures which in their opinion were by the same master. The task was correctly solved by 35% of the 8-year-old children, by 43% of the 12-year-olds, and by 52% of the 16-year-olds. Children have astonishingly fine ability to distinguish between different artistic styles. This discrimination is based not only on analytic thought processes but on a general impression or quality of the whole (*Ganzqualität*).—*M. Haubold* (Leipzig).

5302. Hennessy, W. D. Educating the exceptionally bright child. *Ind. Bull. Char. & Correct.*, 1934, No. 216, 38-43.—Children with high IQ's from an "adjustment school" were compared with children of the same IQ range from the regular grades on their achievement in the same high school. The former were consistently higher in achievement. Three cases are presented.—*C. M. Louttit* (Indiana).

5303. Hetzer, H. *Bilderbücher als Erziehungsmittel*. (Picture books as a means of education.) *Kleine Kinder*, 1934, 9.—Picture books not only serve as a means of occupation for children, but they are very important for educational purposes. The children become accustomed to behave in a quiet contemplative way and get the correct view of the objects in their daily environment. A further value of the picture books is given by the fact that the child has esthetic experiences in looking at the pictures.—*E. Einkenkel* (Thurm bei Gleichau).

5304. Hetzer, H. *Von der Unersetzbarkeit mütterlicher Liebe*. (The impossibility of substituting for mother love.) *Kleine Kinder*, 1934, 9.—The best education of a child can be given by the mother alone, for she is the person whom nature has provided with the necessary protective love.—*E. Einkenkel* (Thurm bei Gleichau).

5305. Hurlock, E. B., & Thomson, J. L. Children's drawings: an experimental study of perception. *Child Development*, 1934, 5, 127-138.—Analysis of the pictures produced when 284 children, ranging in age from 4½ to 8½ years, were asked to draw successively a man, a girl, a house, a dog, a tree, a flower, an automobile, and a boat, indicates that the older children tend to copy more specific objects, to include more details, and more frequently to include background, correct coloring, associated objects, and design. "As perceptions become more discriminating on higher age levels confidence in the ability to draw decreases."—*F. D. McTeer* (Wayne University, Detroit).

5306. Iowa Child Welfare Research Station. *Manual of nursery school practice*. *Bull. State Univ. Iowa*, 1934, N. S. No. 730. Pp. 215.—This bulletin describes the organization and educational activities of the preschool laboratories maintained by the Iowa Child Welfare Research Station. It discusses the child in the preschool, his surroundings, his introduction to the preschool, his health and safety, eating and sleeping, guiding his relationships with other persons, encouraging independence in routine activities, guiding his play with materials, fostering development in art, music, language and speech, procedures on excursions, festivals and special occasions, cooperating with parents, record keeping, training of teachers, observation and visiting in the preschool, and research. The bulletin is illustrated. Its appendix contains sample record blanks, typical schedules and a summary of the abilities of preschool children. A bibliography on nursery education is included.—*B. Wellman* (Iowa).

5307. Irwin, O. C. Motility in newborn infants. *Proc. Iowa Acad. Sci.*, 1932, 39, 243.—The motility of 73 newborn infants was measured by the stabilimeter-polygraph technique. Individual differences were demonstrated. There were no sex differences and there was no relation between motility and nutritional status, hunger, body temperature, sleep, or physical measurements.—*B. Wellman* (Iowa).

5308. Jack, L. M. An experimental study of ascendant behavior in preschool children. *Univ. Iowa Stud.: Stud. Child Welfare*, 1934, 9, No. 3, 7-65.—Ascendant behavior was studied in a group

of four-year-old children by means of an experiment made up of a series of pairings. The group was then divided into thirds, and the factors differentiating between the upper and lower thirds studied. Five non-ascendant children were given special training, and were found to have increased their ascendance scores significantly, although control children of the same age did not gain.—*B. Wellman* (Iowa).

5309. Jones, H. E. **Mental adjustments of crippled children.** *North. Calif. Yrbk. Educ. Excep. Child.*, 1933, 4, 29-36.—Definition and discussion of various types of maladjustment in children, with some suggestions as to causes.—*C. V. Hudgins* (Clarke School).

5310. Krueger, F., & Volkelt, H. [Eds.] **Das bildnerisch gestaltende Kind.** (The child with creative ability in modeling.) *Neue psychol. Stud.*, 1933, 8.—*R. R. Willoughby* (Clark).

5311. Manwell, E. M., & Mengert, I. G. **A study of the development of two- and three-year-old children with respect to play activities.** *Univ. Iowa Stud.: Stud. Child Welfare*, 1934, 9, No. 3, 67-111.—27 items on play activities were observed with 35 two- and three-year-old children. Of these only 15 items showed good agreement between observers and only 8 had the desired distribution. The three-year-old children showed greater language frequency, more imaginative play, and more group play than the two-year-olds, but less manipulative play and watching others. Boys engaged in more physical play than girls. Speech occurred with approximately equal frequency in physical, manipulative and imaginative play, but less frequently in constructive activity.—*B. Wellman* (Iowa).

5312. Meyer, E. **Ordnen und Ordnung bei dreibis sechsjährigen Kindern.** (Ordering and its results in three- to six-year-old children.) Munich: Beck, 1934. Pp. 100.—*R. R. Willoughby* (Clark).

5313. Michael, A. A. **Ueber die sprachliche Darstellung bewegter Szenen durch schwachsinnige und normale Schulkinder.** (The verbal representation of scenes in motion by feeble-minded and normal school children.) Langensalza: Beyer, 1934. Pp. 77.—*R. R. Willoughby* (Clark).

5314. Moore, H. K. **Is the problem boy a weakling?** *J. Juv. Res.*, 1934, 18, 79-89.—150 problem boys on the average showed themselves to be below the standard for a group of normal boys in athletic ability, mechanical aptitude, intelligence, school achievement, emotional stability, absence of speech deficiencies, and social attitudes.—*H. L. Koch* (Chicago).

5315. Obrig, I. **Kinder erzählen angefangene Geschichten weiter.** (Children continue the telling of stories which have been begun.) Munich: Beck, 1934. Pp. 68.—*R. R. Willoughby* (Clark).

5316. Partridge, E. D. **Leadership among adolescent boys.** *Teach. Coll. Contrib. Educ.*, 1934, No. 608. Pp. ix + 109.—A critical review of previous studies of leaders and leadership ability prefaces a report of two experiments: one based on 143 boys in a sum-

mer camp, the other on 226 boys in six scout troops. The scheme advocated for selecting leaders is the highly reliable "five-man-to-man" rating scheme. A considerable halo effect was noted. Leaders were found to excel their fellows in every mental and physical trait measured. "Even on the basis of voice alone, there was evidence that the leader stood out from his associates." The leaders did not fit into a definite type of individual. "There was no typical leader." Leaders exercised a greater influence on the attitudes of the groups than did the others. Educational implications of the study are suggested. The bibliography lists 143 titles.—*J. M. Stalnaker* (Chicago).

5317. Phillips, D. P. **Techniques for measuring the results of parent education: eating and sleeping of preschool children.** *Univ. Iowa Stud.: Stud. Child Welfare*, 1934, 8, 99-146; 273-289.—Parents in 25 homes kept records concerning the eating and sleeping habits of preschool age children. The reliability of parents checked against a visiting observer was roughly equal to the reliability of two trained visiting observers. The technique varied in usefulness with the age and characteristics of the child and type of activity studied.—*B. Wellman* (Iowa).

5318. Pollock, J. **A study of the validity of current periodical and serial literature on child study.** *Univ. Iowa Stud.: Stud. Child Welfare*, 1934, 8, 179-218; 323-331.—The study is concerned with the utilization of the Iowa Curriculum Standard for Estimating the Validity of Child Development Principles in evaluating certain selected current periodical literature on eating, sleeping, elimination, play, and discipline. Articles on child study appearing in four periodicals over eight to ten months were analyzed and scored according to the standard. Some units were discussed frequently, while a large number of units considered important by the authorities from which the material for the standard was drawn received no mention in the articles examined. Judging from the scores there was no significant difference between the articles found in the different periodicals studied.—*B. Wellman* (Iowa).

5319. Reisen, A. **Psychologische Untersuchungen an rachitischen Kindern bis zum zweiten Lebensjahr.** (Psychological investigations on rachitic children up to the second year.) Beuel: Knauth, 1934. Pp. 26.—*R. R. Willoughby* (Clark).

5320. Richards, E. L. **The origin of conduct problems in school children.** (Child Welfare Pamphlets No. 34.) *Bull. State Univ. Iowa*, 1934, N. S. No. 751. Pp. 14.—The following are discussed in relation to the origin of conduct problems in school children: sense of social responsibility, concept of maturity, emotional problems of childhood and adolescence, qualitative and quantitative educational goals, and interest as motivation of behavior.—*B. Wellman* (Iowa).

5321. Ricketts, A. F. **A study of the behavior of young children in anger.** *Univ. Iowa Stud.: Stud. Child Welfare*, 1934, 9, No. 3, 159-171.—The behavior of young children in anger, the situations in

which anger appeared, and the resolution of anger were investigated in 21 children in preschool and 27 in their homes. 9 children attending preschool for two consecutive years decreased in striking, kicking, pushing, pulling, crying and struggling, and increased in fussing and scolding. Crying was more frequent in homes, and pushing and pulling in preschool. Anger tended to decrease with age (three years to four years). No true sex differences were found.—*B. Wellman* (Iowa).

5322. Rieffel, M. *Goûts professionnels de la jeunesse ouvrière de l'U.R.S.S.* (Vocational preferences of working-class children of the U.S.S.R.) *Bull. Inst. nat. orient. prof.*, 1932, 4, 49-57.—A survey of 2019 Russian children from 15 to 16 years old shows that 75% of the boys and 13.5% of the girls prefer the mining industry, while only 2.97% of the children are undecided, and 3.96% are indifferent. More than 10% indicate their dislike for intellectual work. In motivation of choice 52.79% indicate interest in the occupation, and only 3.12% give their own aptitude as a reason. 63% of the children declare that they have chosen spontaneously, while 25% recognize that they have been influenced by others. Sport is the diversion preferred by 80% of the boys and 33% of the girls. Among school studies mathematics ranks first.—(Courtesy *Année psychol.*)

5323. Rüdiger, J. *Der Wiederholungssatz bei der Entwicklung vom Säugling zum fünfjährigen Kinde.* (The law of repetition in the development from infancy to the fifth year.) *Zsch. f. Psychol.*, 1934, 131, 145-174.—In a study by H. Zoepffel (*Zsch. f. Psychol.*, 1929, 111) a personality inventory of a number of infants was made, based on a series of standard behavior tests. In the present study, 15 of the same children, now aged 5-6, were subjected to analogous tests. The results of the first series were not consulted until the second series had been completed. It was found, nevertheless, that in 11 cases out of 15 the results of the second series coincided with those of the first, and that in the 4 deviating cases unusual environmental factors had come into play.—*R. B. MacLeod* (Swarthmore).

5324. Shuttleworth, F. K. *Standards of development in terms of increments.* *Child Development*, 1934, 5, 89-91.—"The judgment is ventured that future work on standards of development will and must move in the direction (a) of stating standards in terms of increments, and (b) of sparing no labor to determine the significance of deviations from the average of such standards."—*F. D. McTeer* (Wayne University, Detroit).

5325. Sullivan, C. *A scale for measuring developmental age in girls.* *Stud. Psychol. & Psychiat.*, 1934, 3, No. 4. Pp. 65.—This scale is based on the characteristic changing interests of girls from 7 to 18 years old. It consists of 200 items for choice by the method of paired comparisons. The study included the testing of 1436 girls in 14 cities, giving a wide range in cultural and social levels. The vocabulary of the test was carefully chosen to insure comprehensibility. The frequency of "mature responses" at all ages of the scale furnished age norms which are presented in tabular form. Reliability of the scale was found to be high. The study indicates that for girls "developmental age" increases steadily to the sixteenth year, with no abrupt change at puberty. After the sixteenth year developmental age does not increase directly with chronological age. An appendix contains reproductions of the preliminary tests and the scale itself.—*H. D. Spoerl* (Boston, Mass.).

5326. Szuman, S., Pieter, J., & Werynski, H. *Psychologia światopoglądu młodzieży.* (The psychology of the Weltanschauung of youth.) Warsaw-Lwów: Książnica-Atlas, 1933. Pp. viii + 474. 20 zloty (paper).—Three studies of the phases of development of idealism, philosophy and religion of youth.—*S. Blachowski* (Poznan).

5327. Volochov, N. P. [The Belski method of investigating the emotional sphere applied to abnormal children.] *Sovet. psikhonevr.*, 1933, No. 2, 70-76.—The possibility of applying the method of emotional sphere investigation depends on the intellectual level of the subject. The investigation of mentally defective children shows the dependence and parallelism between the emotional and intellectual evolution in the structure of the whole personality. The method can establish damage of the structure of personality, the degeneration of intellect and will, which permits the use of this method for diagnostic purposes.—*A. Yarmolenko* (Leningrad).

5328. Witty, P. A. *The only child of five.* *Psychol. Clin.*, 1933, 22, 73-87.—A study of 153 only children five years of age in Kansas City, Mo. Statistical comparisons are made between ratings and measurements of this group and various control groups. The only children show themselves superior to other children in health, physical development, intelligence, and character traits. Their activities are normal, and there is no indication that they are inferior.—*J. T. Metcalf* (Vermont).

[See also abstracts 4878, 4879, 4892, 4909, 4917, 4935, 4968, 5031, 5037, 5080, 5083, 5090, 5125, 5142, 5147, 5166, 5171, 5240, 5268.]



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